

<b>Citation</b>	Kim Loyens, Jeroen Maesschalck, (2010), <b>Toward a Theoretical Framework for Ethical Decision Making of Street-Level Bureaucracy: Existing Models Reconsidered</b> Administration & Society, 42(1), 66-100.
<b>Archived version</b>	Author manuscript: the content is identical to the content of the published paper, but without the final typesetting by the publisher
<b>Published version</b>	<a href="http://dx.doi.org/10.1177/0095399710362524">http://dx.doi.org/10.1177/0095399710362524</a>
<b>Journal homepage</b>	<a href="http://aas.sagepub.com">http://aas.sagepub.com</a>
<b>Author affiliation</b>	Kim Loyens, Leuven Institute of Criminology, Faculty of Law, KU Leuven (University of Leuven), Belgium Jeroen Maesschalck, Leuven Institute of Criminology, Faculty of Law, KU Leuven (University of Leuven), Belgium
<b>Author contact</b>	<a href="mailto:kim.loyens@law.kuleuven.be">kim.loyens@law.kuleuven.be</a> , <a href="mailto:jeroen.maesschalck@law.kuleuven.be">jeroen.maesschalck@law.kuleuven.be</a> +32 (0) 16 329452, +32 (0) 16 325558
<b>IR</b>	<a href="https://lirias.kuleuven.be/handle/123456789/266555">https://lirias.kuleuven.be/handle/123456789/266555</a>

*(article begins on next page)*

# **Toward a Theoretical Framework for Ethical Decision Making of Street-Level Bureaucracy: Existing Models Reconsidered**

## **Abstract**

Much research has been done on the way in which individuals in organizations deal with their discretion. This article focuses on the literature on street-level bureaucracy and the literature on ethical decision-making. Despite their shared attempt to explain individual behaviour and decision-making, these research traditions have been developed quite independently. Moreover, while they both list relevant influencing factors, they do not succeed entirely in clarifying how and under which circumstances these factors have an impact on individual behaviour and decision-making. This article attempts to substantiate how the concept of 'social mechanism' could help to open the black box of causation.

## **Introduction**

One of the most fundamental questions in public management is how public servants deal with their discretion. Much research has been conducted on the way individuals in an organization handle their discretionary powers. This article focuses on two research traditions with a clear focus on discretion: (1) the literature on street-level bureaucrats and (2) the literature on ethical decision-making in organizations. In spite of the fact that they share a research topic, these two traditions developed quite independently. Inspired by and founded on these research traditions, this article attempts to integrate these two lines of literature into a general theoretical framework that can form the basis for further empirical research on (ethical) decision-making of frontline workers. The article hopes to deliver a twofold contribution. First, it attempts to integrate the two research traditions so as to combine the advantages of both, while compensating for their respective disadvantages. Second, the concept of 'social mechanism' will be added to understand the causal link between the explanatory factors on the one hand, and the observed types of (ethical) decision-making on the other and thus move beyond a mere list of factors.

## **Discretion As A Starting Point**

### **Discretion Defined**

Discretion is an interesting research topic that has been widely studied and defined in various ways. Galligan (1990) considers discretion "*a sphere of autonomy within which one's decisions are in some degree a matter of personal judgment and assessment*". Hawkins (1992) states that "*discretion might be regarded as the space (...) between legal rules in which legal actors may exercise choice*". Dworkin (1977) describes it as "*the hole in the doughnut (...) an area left open by a surrounding belt of restriction*", while Baldwin (1995) points out that discretionary decision-making is "*a continuing process, a subtle and shifting affair that is the result of substantial human interpretative work*". Cooper (1998) speaks of attempts to "*reconcile competing demands*" and Davis (1969) states that a public officer has discretion "*wherever the effective limits on his power leave him free to make a choice among possible courses of action and inaction*".

Despite different nuances in these definitions, discretion is always about a tension between general and abstract rules, on the one hand, and specific situations, on the other. In other words: a 'flexibility versus uniformity' dilemma. For some scholars, discretion is in fact a necessary evil that should be restricted as much as possible. Davis (1969), for example, considers discretion "*the major source of injustice*". Together with several others (Thompson, 1975; Fyfe, 1979; Sabatier & Mazmanian, 1979; Brigham & Brown, 1980; Edwards, 1980; Linder & Peters, 1987), he essentially pleads for a decrease of discretionary powers and severe procedural constraints on the exercise of discretion. Other scholars, however, think of it as 'inevitable' (Jowell, 1973) or even an essential condition for the efficient and effective implementation of rules and policy (Deutsch, 1985; Lincoln, 1985; Rogers & Young-Imkim, 1985; Handler, 1986; Bakker & van Waarden, 1999). Still, they admit that discretionary powers can (and will) be abused. Hence, the exercise of discretion should be managed properly, for example through

direct supervision, standardization of working procedures, performance-oriented reward systems, or attempts to change the organizational culture.

### **Research traditions with a focus on discretion**

Several research traditions focus on the way staff members in both public and private organizations deal with their discretion. By means of illustration we list six specific lines of research. In addition to more general traditions like the literature on regulatory styles, street-level bureaucracy, principal-agent theories and ethical decision-making, we also refer to studies about discretion in two specific policy domains: sentencing and policing.

The literature on regulatory styles is the first example of a more general research tradition with a focus on discretion. It states that individual functionaries develop routines to reduce the complexity of their daily working life. By using standard operating procedures they relieve themselves from the heavy burden to constantly make series of decisions. When these individual routines are transmitted across the organization they could even become part of the organizational culture. Terpstra and Havinga (1999) distinguish four typical regulatory styles that can (separately or in combination with each other) be dominant in a specific organization, namely traditional, bureaucratic, professional and managerial policy implementation. Kagan (1994) focused more on the factors that explain the choice for a particular enforcement style. He speaks of four groups of influencing factors: legislation, task description, political environment and leadership. Other factors could be organizational structure, objectives of the organization, training and the experience of officials (Hawkins, 1984; Koolhaas, 1990).

Along the same line, the second research tradition focuses on frontline officers in particular. These street-level bureaucrats are systematically confronted with scarce resources and a highly demanding work environment. Originally developed by Lipsky (1980), this theoretical tradition points out that street-level bureaucrats (e.g. police officers, teachers, social workers), inevitably have a certain degree of discretion, which constantly forces them to make choices in a demanding and complex environment. As in the literature on regulatory styles, these frontline officers develop routines as a way to cope with these daunting tasks (cf. *infra*).

Third, the topic of discretion is also important in the economics-oriented literature. Particularly the principal-agent problem deals with this issue. Central topics in this tradition are about (1) the way in which managers (principals) guarantee that their subordinates (the agents) implement policy decisions as planned, (2) ways to motivate agents to constantly serve the public interest and (3) methods used by principals preventing agents to abuse their discretion (see for example: Grossman & Hart, 1983; Sappington, 1991; Waterman & Meier, 1998; Bøhren, 1998; Vermillion, Lassar & Winsor, 2002).

The fourth research tradition that deserves mentioning treats the decision-making dynamics of an individual faced with choices involving ethical issues and thus focuses on a specific type of discretionary powers: ethical decision-making or decision-making in which certain values are at stake (Bommer et.al.,1987) (cf. *infra*).

The final two lines of research are both situated in the particular policy domain of criminal justice. First, there is an elaborated tradition on the topic of sentencing. Studies of judicial discretion suggest for example that sentencing outcomes are influenced by defendants' race (e.g. Green, 1961), socioeconomic status (e.g. Hagan, Nagel & Albonetti, 1980; Spohn, Gruhl & Welch, 1982), gender (e.g. Atkinson & Newman, 1970), earlier decision outcomes (e.g. Smith, 1986; Miethe & Moore, 1986; Dhimi, 2003) and judges' stereotypes about the likelihood of recidivism (Albonetti, 1991). Research findings in this tradition, however, have been inconsistent (see for example: Hagan, 1974; Farrell & Swigert, 1978; Thomson & Zingraff, 1981; Albonetti, 1991).

Second, there is a particular line of research with a focus on police operational styles. The central idea is that officers might cope differently with similar occupational strains and may thus develop different styles. Empirical research led to a number of typologies with in each case a limited number of styles that can be applied separately or in combination with each other. Wilson (1968), for example, speaks of the legalistic, watchman and service style, while Brown (1981) refers to the service style, the old-style crime-fighter, the clean-beat crime-fighter and the professional style. Broderick (1977) describes the enforcer, realist, idealist and optimist. The operational style may be constant in various situations or differ depending on the particular context. Despite major differences, these approaches are similar in their attempt to classify officers on the basis of their occupational attitudes and characteristics.

There are many other research traditions with a focus on discretion. It would, however, lead us too far to go into details about all these theories. This article emphasizes two specific lines of research, particularly the theories on street-level bureaucracy and ethical decision-making. Despite their clear focus on discretion, these traditions have been developed quite independently. Arguably, they could be integrated in one, more extended, theoretical framework, through which the highly important topic of the ethical decision-making of street-level bureaucrats could be addressed. While the literature on street-level bureaucracy emphasizes the central role of frontline workers in producing public policy and their far-reaching influence on society and public trust, there is a lack of research on the way in which street-level bureaucrats deal with dilemmas that have an explicit ethical component. The integration of street-level bureaucracy and ethical decision-making theories could facilitate research in that direction.

### **Coping Behaviour Of Street-Level Bureaucrats**

Much research has been conducted on the decision-making of street-level bureaucrats. After a definition of the concept, the subsequent part provides an overview of the most important conclusions in this line of research. It concludes with the statement that more insight is needed into the black box of causation.

#### **Street-Level Bureaucrats: A Definition**

Lipsky (1980) defined street-level bureaucrats as *"public service workers who interact directly with citizens in the course of their jobs and who have substantial discretion in the execution of their work"*. They include teachers, welfare workers, police officers, health and safety inspectors and other public

employees who control access to public programs or enforce public laws and regulations. Their position in the implementation process can thus be described as 'unique' and 'uniquely influential' (Meyers & Vorsanger, 2003). Lipsky (1980) speaks of 'agents of social control'. One of the core arguments in this literature is the point that, although often in the lower layers of the hierarchy, these actors 'produce public policy' (Meyers and Vorsanger 2003). Hupe and Hill (2007) argue that *"to a certain extent, they are policy formers rather than implementers"*. Some researchers go even further in emphasizing the influence of street-level workers and describe them in terms of *"citizen-agents who help create and maintain the normative order of society"* (Maynard-Moody & Musheno, 2003) or even 'street-level leaders' (Vinzant & Crothers, 1998).

We can distinguish several reasons why discretionary powers are inevitable and even essential in the work of street-level bureaucrats. First, they often work in situations that are too complicated to be reduced to standard procedures or programmatic formats. This complexity combines with the problem of scarce resources, thus creating a need for discretionary judgments (Meyers & Vorsanger, 2003), which is both a burden and an opportunity. In the words of Vinzant & Crothers (1998): *"The decision-making environment provides the 'stuff' with which the workers work, from which they have to make choices and construct solutions as they do their jobs. This is a difficult and problematic task, of course, but it is both a curse and an opportunity"*. Second, in making judgments about people street-level bureaucrats need discretion to respond properly to the human dimensions of situations (in other words, the response depends on the particular situation clients are in). Third, as Lipsky (1980) argues, discretion promotes workers' self-regard, which is important in a worker-client relationship. Finally, the practical independence and difficulty of direct supervision of frontline workers like police officers or social workers leads to a *de facto* discretion (Brehm & Gates, 1997). This sometimes implies that street-level workers behave in ways that are unsanctioned, or even contradicting official policy, because the structure of their jobs and the inescapable dilemmas they have to deal with make it impossible to fully achieve the expectations of the agency, the client and the broader society (Vinzant & Crothers, 1998; Behn, 2001).

### **Routines of frontline officers**

To deal with their discretion street-level bureaucrats develop routines to avoid making endless individual choices in a demanding and complex environment. Research in this tradition attempts to conceptualize and understand mechanisms like 'creaming', 'routinizing' and 'controlling clients' (Lipsky, 1980; Moore, 1987; Fineman, 1998; Nielsen, 2006), that are often used to attempt achieving a fair and manageable workload. Most researchers focused on how negative aspects – such as scarce resources and external, diverging demands – of the job as street-level bureaucrat affect their behaviour and thus describe these routines in terms of 'coping strategies' or 'defences against discretion' (Lipsky, 1980) and even 'strategies of survival' (Satyamurti, 1981). Nielsen (2006), however, points out that coping mechanisms are not just a way to avoid frustration, but can also be used in a more positive sense as a 'way to gain satisfaction'.

### **The exercise of discretion explained**

The literature on street-level bureaucrats identifies a broad variety of factors that are claimed to explain the process of frontline decision-making or the development of coping behaviour. Much empirical research has been done to examine the actual effects of these factors that are assumed to have an impact on street-level discretion. However, the findings from these studies have reached mixed and sometimes contradictory conclusions.

In accordance with Prottas (1979) and Hasenfield (1983), Scott (1997) distinguished three categories of influencing factors: individual decision maker characteristics, organizational characteristics and client attributes. Vinzant and Crothers (1998) complete this list with extra-organizational factors, such as the broader community, laws and regulations, the media, other service agencies and general situational variables. These four categories of influencing factors will be discussed below.

First, the effect of individual decision makers' characteristics is widely discussed. Miller (1967) already found a strong, positive relationship between the level of professionalism and the propensity to deviate from organizational standards and rules. This is confirmed by Brehm and Gates (1997) who found that bureaucrats are largely self-regulating and that their decisions are more influenced by their clients and peers than by their supervisors. Kroeger (1975) concluded that sympathetic case workers tended to provide more benefits to clients than did rule-oriented workers. On the basis of a literature review, Meyers and Vorsanger (2003) come to the conclusion that individual interest, professional norms and the processes through which workers construct meaning in their daily work routines have an influence on their decisions. Other studies lead to a similar conclusion: professional norms, workers' beliefs and moral values of frontline officers are important determinants of street-level decision-making (Sandfort, 2000; Winter, 2001; Maynard-Moody & Musheno, 2003). Vinzant and Crothers (1998) added to this list the presumed influence of gender, educational background, ethnicity, culture, role definitions and religious beliefs.

Interestingly, in Scott's (1997) laboratory experiment individual decision makers' attributes were found to be among the least influential determinants of worker's decision-making. He came to the conclusion that organizational characteristics, a second category of influencing factors, had the most impact. Examples of these include the organization's internal structure, workload pressure and also rules and constraints. Wasserman (1971) and Peyrot (1982) concluded that case workers' flexibility is severely limited by organizational routines. Aiken and Hage (1966) found that high levels of formalization in the organization created serious constraints on case workers' decisions. The organizational culture is also an influencing factor. Not only the level but also the type of discretion is moderated by internal cultural characteristics (Kelly, 1994). Last but not least, co-workers and supervisors can strongly influence street-level decision-making (Vinzant & Crothers, 1998).

Third, several extra-organizational factors are believed to have an impact on the exercise of discretion. Researchers do not only mention the community with its specific culture, typical problems and unique

expectations, but also the media, other service providers and even the climate (Scott, 1997; Vinzant & Crothers, 1998).

The most varied strand of research, however, concerns the assumed influence of the fourth category 'client attributes'. Goodsell (1980 & 1981), for example, states that clients who exhibit greater levels of need tend to receive proportionally greater benefits, whereas others conclude that clients who are viewed as more difficult or troublesome receive fewer benefits because the high work load tends to force service providers to tactics designed to make the application process more difficult for this specific group of clients (Hasenfield & Steinmetz, 1981; Smith, 2003). Neither is there agreement about the relative importance of client attributes compared to the other categories. In their empirical research, Ellis et al. (1999) observed that workers not always consider the client's needs, but rather manage their work flow according to their own priorities, while Brodtkin (1997) emphasizes the goodwill of street-level bureaucrats by concluding that "*caseworkers, like other lower-level bureaucrats, do not just do what they want or just what they are told to want; they do what they can*".

### **From factors to mechanisms**

Empirical research on street-level bureaucracy appears to have reached mixed and sometimes even contradictory results. Together with Meyers and Vorsanger (2003) we believe, however, that these results suggest 'complexity rather than contradiction'. Street-level bureaucrats are embedded in a complex environment influenced by organizational, professional, community and socio-economic systems. Neither one single factor nor one singly theory can fully explain the exercise of street-level discretion (Hjern & Porter, 1981; Winter, 2003). The empirical research should focus more on the interaction between variables (Vinzant & Crothers, 1998). Moreover, there is a need for more fully developed conceptual models that account, not only for interacting, but also for competing forces in the exercise of street-level discretion (Meyers & Vorsanger, 2003). In other words, there is a need to develop more fully integrated theories of how individual, organizational and situational factors channel street-level discretion into specific directions. This is possible by using an approach that examines the conditions under which specific types of bureaucratic discretion will be exercised and the relative importance of factors that may influence discretionary outcomes (Scott, 1997). As will be argued later, the concept of 'social mechanism' (Hedström & Swedberg, 1998) can shed light on this issue by offering a different point of view.

### **Theories On Ethical Decision-Making**

Ethical decision-making has also been studied to a great extent. This section starts with a general definition of ethical dilemmas (situations in which ethical decision-making is needed), after which the most important models that try to explain ethical decision-making are reviewed. Although this literature developed almost entirely independently from the street-level bureaucracy literature, the conclusion is similar: more insight is needed into the black box of causation. The concept of 'social mechanism' could help opening this box.

### **Ethical decision-making defined**

Ethical decision-making occurs when an individual is faced with “*choices involving ethical issues*” (Bommer et al., 1987). But when exactly does an issue become an ‘ethical issue’? These issues are often labelled as ‘ethical dilemmas’ or situations in which important ethical values are in conflict (Cooper, 2001; Maesschalck, 2005). Ethical decision-making can then be described as the application of an ethical standard (often a combination of ethical standards) in specific behaviour in a particular situation. Some scholars, however, use a much broader definition of ‘ethical issues’. Velasquez and Rostankowski (1985), for example, refer to situations “*where a person’s actions, when freely performed, may harm or benefit others*”. In other words, decision-making becomes ethical decision-making from the moment that a chosen action or decision has consequences for others (which actually includes most decisions). Whatever the definition used, it is important to note that ethical issues may arise in any step of the decision-making process, not only in determining objectives or in comparing various alternative courses of actions, but also in the implementation step (Boulding, 1966; Bommer et al., 1987).

### **Models of ethical decision-making**

Theories on ethical decision-making are mainly based on the literature in the fields of business ethics (e.g. Treviño & Weaver, 2003), developmental psychology (Kohlberg, 1969 & 1984; Rest, 1984) and organizational studies (e.g. Jones, 1991; Sims and Keon, 1999). Central questions in this research field concern the ways in which individuals (in most studies private sector managers) deal with ethical dilemmas and the factors that influence the ethical decision-making process. In order to answer these questions, several models of ethical decision-making were developed, in which various explanatory factors – both individual and situational – are presented. We briefly present six such models by means of illustration.

A first example is the model of Kohlberg (1969 & 1984). As a psychologist, he mainly focused on the role of cognitive moral development, trying to explain how individuals think about moral dilemmas, not how they actually behave in a particular situation. The question is, however, whether the capability for ethical reasoning (which is connected to the level of moral development) guarantees ethical action or behaviour. According to Treviño (1986) and Bommer et al. (1987) the real dependent variable should, therefore, be ethical behaviour.

Rest (1986), who also pointed towards psychological processes in explaining ethical decision-making, intended to develop a model that could be used to explain ethical behaviour and not just moral reasoning. His model, which is a second important example, speaks of four psychological processes that are considered to influence whether or not individuals will behave ethically: ethical interpretation, ethical judgment, selection of the moral action and implementation of the moral course of action.

A third example is Treviño’s (1986) ‘person-situation interactionist model’. In her model individual factors (such as moral development, locus of control, ego strength, etc.) remain important determinants of ethical decision-making, but she combines them with situational variables or situational moderators (such

as immediate job context, organizational culture, characteristics of the job itself, moral content of the organizational culture, etc.). Her framework is important because previous models tended to emphasize either individual or situational variables, but neither approach had captured important interaction effects between individual and situational variables (Wittmer, 2001).

Fourth, Bommer et al. (1987) identified several environments that could have an impact on managers' decisions. Work environment, governmental/legal environment, social environment, professional environment and personal environment are all considered important in influencing ethical decision-making. An interesting additional contribution of these researchers is that they distinguish between the degree of influence the decision maker perceives the various factors to have, on the one hand, and the actual influence the factors have, on the other hand (e.g. even if a subordinate perceives the influence of a supervisor as rather low or completely absent, the supervisor probably has some influence on this particular subordinate).

A fifth model has been developed by Jones (1991). He argues that virtually all existing models that claim to account for ethical decision-making miss one crucial aspect: the characteristics of the moral issue itself. In his 'issue-contingent model of ethical decision-making' he presents moral content as a multidimensional complex, consisting of 6 components, for example magnitude of consequences and proximity (cf. *infra*).

Finally, as stated by some scholars, the individual's moral judgment is also influenced by his/her preferred ethical philosophies (Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Stead et al, 1990). The two basic types of ethical philosophies are deontological and teleological evaluation. Deontological evaluation refers to the inherent rightness or wrongness of a particular behavioural option (Hunt & Vitell, 2006) and teleological evaluation to the fact that one's choice should be based on what would be best for all affected social units (Ferrell & Gresham, 1985). These ethical philosophies could be learned through socialization (e.g. family, social group, formal education, professional environment). Ferrell and Ferrell (1982) found, however, that the opportunity for unethical behaviour is a better predictor of behaviour than personal or peer beliefs.

Of course these are but a few of the existing models of ethical decision-making. Despite the obvious variation, all these models have at least one thing in common: the tendency to list influencing factors of ethical decision-making and/or ethical behaviour. To provide a clearer overview of all these variables, several authors reviewed the empirical research (Ford & Richardson, 1994; Wittmer, 2001; Loe, Ferrell & Mansfield, 2000) and proposed a list of both individual and environmental or situational factors that are believed to have an impact on moral reasoning and/or behaviour. Despite mixed and even contradictory results, it is interesting to provide as complete a list as possible of influencing factors, be it just to show the broad variety and amount of postulated determinants (see table 1).

**Table 1 – Review of factors assumed to have an impact on ethical decision-making**

	<b>Individual factors</b>	<b>Situational/environmental factors</b>
<i>Ford &amp; Richardson (1994)</i>	<ul style="list-style-type: none"> <li>○ Cognitive development moral</li> <li>○ Locus of control</li> <li>○ Age</li> <li>○ Work experience</li> <li>○ Years of employment</li> <li>○ Gender</li> <li>○ Machiavellianism</li> <li>○ Personal value systems</li> <li>○ Personal ethical philosophy</li> <li>○ Economic value orientation</li> <li>○ Foreign nationality</li> <li>○ Motivational orientation</li> </ul>	<ul style="list-style-type: none"> <li>○ Reward &amp; punishment structures</li> <li>○ Significant or referent others</li> <li>○ Organizational policies &amp; codes of conduct</li> <li>○ Top management commitment</li> <li>○ Ethical work climates</li> <li>○ Opportunity</li> <li>○ Ethics training programs</li> <li>○ Formalization</li> <li>○ Centralization</li> <li>○ Control</li> <li>○ Organizational size</li> </ul>
<i>Loe, Ferrell &amp; Mansfield (2000)</i>	<ul style="list-style-type: none"> <li>○ Cognitive development moral</li> <li>○ Gender</li> <li>○ Moral philosophy</li> <li>○ Age</li> <li>○ Education</li> <li>○ Work experience</li> <li>○ Nationality</li> <li>○ Religion</li> <li>○ Locus of control</li> <li>○ Intent</li> <li>○ Moral intensity</li> </ul>	<ul style="list-style-type: none"> <li>○ Opportunity</li> <li>○ Codes of ethics</li> <li>○ Rewards and sanctions</li> <li>○ Culture and climate</li> <li>○ Significant others</li> </ul>
<i>Wittmer (2001)</i>	<ul style="list-style-type: none"> <li>○ Personal attributes: religion, nationality, sex, age</li> <li>○ Education and employment background: type of education, years of education, employment &amp; years of employment</li> <li>○ Personality, beliefs and values: Machiavellianism, values, locus of control, role conflict, acceptance of authority</li> </ul>	<ul style="list-style-type: none"> <li>○ Referent groups: peer group influence, top management influence, rewards and sanctions</li> <li>○ Codes of conduct</li> <li>○ Type of ethical decision</li> <li>○ Organizational factors: size, organizational level</li> <li>○ Industry factors: industry type, business competitiveness</li> </ul>

**From factors to mechanisms**

Despite the fact that listing and structuring possible explanatory variables could be an interesting exercise, the problem with all these models, is that they fail to provide insight into the exact way in which they influence ethical problems. These models are ‘basically factor studies rather than process studies’, because ‘the ethical decision-making process is often treated as a black box’ (Thong & Yap, 1998). Hence, Brady & Hatch (1992) draw the rather harsh conclusion that *“these models serve the purpose of reviving interest in the empirical research tradition, rather than providing any new theoretical insights”*.

They speak of ‘models that betray their claim to theoretical status’, because they (1) only raise general issues, (2) create confusion regarding the nature of causal links and (3) attempt to increase the predictive power through the simple aggregation of moderating factors, possibly leading to a situation of ‘overdetermination’ (Weick, 1979), which disregards individual differences. According to Brady and Hatch (1992) the result is “*work which on the surface resembles genuine theoretical contributions but underneath is really the reiteration of assumptions common to the empirical research tradition*”. The concept of ‘social mechanism’ (Hedström & Swedberg, 1998), which will be explained later, could also be introduced in this particular research tradition as a means to try and open the ‘black box’.

### **Integrating Two Literature Traditions: A Challenging Exercise**

This part attempts to integrate the two lines of research discussed above (street-level bureaucracy and ethical decision-making) so as to develop an extended model in which the advantages of both can be combined, while compensating for their respective disadvantages. As stated above, the literatures on street-level bureaucracy and ethical decision-making both focus on the important topic of ‘dealing with discretion’. They also maintain a similar research strategy by identifying factors that could influence decision-making. Nevertheless, the integration of both is a challenging exercise with several possible obstacles. A variety of issues remains unsolved (see table 2), including (1) the question whether the theory of street-level bureaucracy could be applied in a non-governmental environment, (2) whether the ethical decision-making models are applicable among frontline workers and (3) whether the respective interpretations of ‘discretion’ and ‘ethical dilemmas’ are comparable. Because both research traditions can be an inspiration and enrichment for each other, we will try to find a satisfying answer to these three questions.

**Table 2 – Sector, target population and type of dilemmas in ethical decision-making and street-level bureaucracy theories**

	<i><b>Ethical decision-making</b></i>	<i><b>Street-level bureaucracy</b></i>
<b>Sector</b>	Private	Public, semi-public
<b>Target population</b>	Managers	Frontline officers
<b>Type of dilemmas</b>	Ethical dilemmas	Dilemmas concerning discretion in policy implementation

#### **Private and public sector research**

Our first question concerns the sector on which the research traditions are oriented. While the literature on ethical decision-making was first developed in the private business sector, street-level bureaucracy theory is mainly applied on the public or semi-public sector.

Ethical decision-making models were originally mainly applied on managerial ethical decision-making in sales and marketing divisions of private sector companies. Yet, over the years, the scope gradually

expanded to ethical decision-making in general (Hunt & Vitell, 2006). Kaptein is but one scholar who showed that it is indeed possible to use a similar ethics-oriented theoretical framework in both private companies and public sector organizations like the police (Kaptein, 2001; Kaptein & Wempe, 2002) (cf. *infra*). Kelley and Elm (2003) also succeeded in their effort to apply Jones' (1991) issue-contingent model to social service administrators, despite the fact that it was originally developed to understand business managers' ethical decision-making.

The literature on street-level bureaucracy is largely concentrated on decision-making processes in the public or semi-public sector. An important question is whether the models of street-level bureaucracy could be applied to private sector organizations as well. In order to improve possibilities for comparative research (public/private), the use of similar models would be interesting. Comparative research in that direction is believed to be important for at least three reasons.

First, privatization as a phenomenon has occurred in many public sector domains. Activities that have always been considered 'typical governmental' are now performed by non-governmental organizations or even by the business sector (Boston, 1995; Rainey, 2004), for example many police surveillance tasks are now done by private security firms (Prenzler, 2004).

A second reason is in line with the previous one. The last decades have seen an increase of organizations with a rather ambiguous and indistinct character. It is not always clear whether these organizations are part of the public or private sector. This blurring of boundaries between public and private organizations is the result of an increasing cooperation between both sectors, but can also be considered a compromise to avoid complete privatization and thus maintain governmental control (Perry and Rainey, 1988; Rainey and Bozeman, 2000). These 'hybrid organizations' combine characteristics of both the public and private sector, making them an interesting research topic. Examples include universities that provide consultancy services on a commercial basis and social housing providers that compete with commercial property developers.

We believe there is a third argument for (at least) trying to broaden the possible applicability of street-level bureaucracy theories. A comparative analysis of frontline workers in a variety of environments (more or less public/private) would enable us to understand more fully the impact of these environmental conditions on the way in which frontline workers deal with dilemmas and discretion (Kelley & Elm, 2003). This in turn could help explaining the mixed and contradictory results of the existing literature that was described above.

### **Target population**

Not only do the two research traditions focus on a different sector or organizational context, they also aim at a different professional groups. While the initial target population of ethical decision-making models consisted of private sector managers, street-level bureaucracy theory of course focused on frontline workers. These two groups are obviously very different in terms of job characteristics, tasks and professional expectations. Yet, they also share some important characteristics. Both groups are highly

independent, experience little direct control, have to balance between conflicting interests and have to take complex decisions in the face of scarce resources.

To substantiate this claim, inspiration is drawn from the work of Vinzant and Crothers (1998) on street-level leadership. They give several reasons why 'leadership' theories – that are typically associated with individuals who occupy top positions in organizations – could in fact be the basis for an appropriate and useful theoretical framework to analyse the work of street-level bureaucrats. First, frontline workers are (more or less) independent actors who exercise discretion, like their executive-level counterparts, in complex and fluid environments. Second, the choices made by both leaders and workers are often difficult because they could have drastic consequences for individuals, organizations and even communities. Third, the actions of leaders and workers are also influenced by a range of circumstantial and other factors in the context of values, norms and other constraints. Finally, frontline officers (especially in a public- or semi-public environment) have a great deal of power, in some ways comparable to managerial power. In sum, the job of street-level bureaucrats arguably shares some important characteristics with management. In fact, Kaptein (2001) succeeded to apply the same ethics management model on both private sector managers and frontline public workers (in this case individual police officers).

Of course, there are some crucial differences, not the least hierarchical control. Yet, this in fact makes the job of street-level bureaucrats even more intriguing. On the one hand they experience a great deal of independence and power, but on the other hand they have to deal with a range of divergent strains.

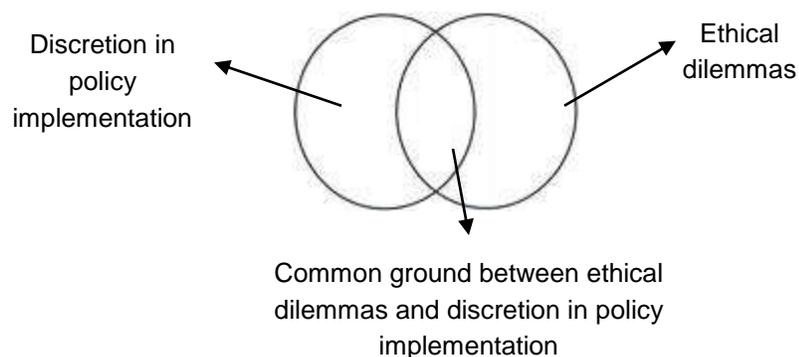
### **Several (ethical?) dilemmas**

If differences about sector and target group can be overcome, the next question is whether ethical dilemmas on the one hand, and situations that ask for general discretion on the other are to some extent comparable. To answer this question at least two central issues should be addressed.

First, there is a more theoretical question. Can the concept of 'ethical dilemma', which is central in the ethical decision-making literature, be compared to the more general 'discretion' that is – at least in street-level bureaucracy theories – connected to the individual freedom of frontline officers in policy implementation? On the one hand, it depends on the specific definition of ethical dilemma that is used in a particular study. If an ethical dilemma is defined as 'a situation in which important ethical values are in conflict' (Cooper, 2001; Maesschalck, 2005) the scope is much more narrow than when it is considered 'a chosen action or decision that has consequences for others' (Velasquez and Rostankowski, 1985). The latter will be more in line with the general discretion in policy implementation. Some scholars in the ethical decision-making literature claim that most of the developed models are in fact applicable to decision-making in general. They believe ethics to be only one of the number of dimensions in the decision process, besides economic, political, technological and social issues (Fritzsche, 1991; Fritzsche and Becker, 1983). Still, discretion can also refer to situations in which no ethical values are at stake and in which the consequences for others are limited (see figure 1: left part).

On the other hand, not all ethical dilemmas are connected to the discretion in policy implementation of an individual staff member. A situation in which a person has to decide what to do if a colleague transgresses certain rules (e.g. should you report it to your supervisor if you see a colleague steal something from the office, or should you just talk to your colleague) does usually not imply a policy implementation type of discretion (except if it is your job to examine and report misconduct of staff members, for example in an internal inspection or audit), while it is obviously an example of an ethical dilemma (see figure 1: right part). Hence it is important to found the common ground between ethical dilemmas and discretion in policy implementation (see figure 1: middle part). Of course, this category is still very broad and it is essential to distinguish between on the one hand ethical dilemmas in which you can choose between various options within your policy implementation discretion (e.g. a police officer can choose between giving a ticket or giving a warning for a traffic offence) and on the other hand ethical dilemmas in which you may choose to act beyond your policy implementation discretion due to ethical reasons (e.g. an official who refuses to unite a homosexual couple in marriage due to religious reasons).

**Figure 1 – The common ground between discretion in policy implementation and ethical dilemmas**



A second issue is the fact that perhaps private sector managers have to deal with entirely different dilemmas than their colleagues at the managerial level in the public sector. The same could be true if these managerial dilemmas would be compared to difficult situations frontline workers in public and private organizations have to deal with. As Kelley and Elm (2003) state: *“It is not usual to find private sector managers dealing with life and death decisions affecting individuals with whom they have become familiar. It is, however, the essence of the decisions made in social service organizations”*. It is indeed possible that the type, seriousness and implications of the dilemmas are not at all comparable. This claim should, however, be supported by a systematic empirical study in which the nature of the dilemmas is compared on the basis of appropriate criteria. The question is whether criteria could be found that are useful for such a comparison. Inspiration can be found in classification systems that have recently been developed in the ethical decision-making literature. While the literature on street-level bureaucracy classifies behavioural strategies of coping mechanisms in various typologies, no classification system

has been developed to list specific types of policy implementation discretion or situations in which frontline officers need to make a difficult decision. This could, however, be interesting, because specific situational conditions could have an impact on the decision-making process and thus the coping mechanism. In the ethical decision-making literature, this link between dilemma type and decision-making process is acknowledged, leading to a number of dilemma classification systems. In the context of this article these classifications are particularly interesting because they make it possible to compare the types of dilemmas public and private staff members have to deal with. As an illustration, three of the most interesting classification systems will be listed.

First, Kaptein (2001) distinguished three types of ethical dilemmas according to the three types of relationships that he considers relevant from the point of view of integrity. Arguably, these categories can also be used to identify general dilemmas without an explicit ethical component. A first type of dilemma is labelled 'entangled hands' and refers to a discrepancy between the personal interests of the employee and the interests of the organization (e.g. misuse of confidential organizational information for private reasons; holding other jobs that are incompatible with the interests of the organization). Second, the 'many hands' dilemma is considered a conflict between the functional interests of employees, managers, departments and units (e.g. desirability of internal competitiveness; delegation of functional responsibilities). A third dilemma type is defined as 'the dirty hands dilemma'. In that case, the interests and expectations of the stakeholders are incompatible with the interests of the organization (e.g. the use of questionable methods to apprehend criminals). Kaptein (2001) also claims that a combination of several dilemmas is possible in a particular situation.

While Kaptein focuses on the relationship, Wark and Krebs (2000) make a distinction on the basis of dilemma content, a second type of classification. This was the result of an empirical study among 60 undergraduate students who were asked to indicate what is at stake in several given dilemmas. After two independent classification sessions by a research assistant and the authors themselves, four main issues were identified. A first series of dilemmas dealt with 'upholding justice' (e.g. procedural fairness, combating immorality, normative order). Second, there were dilemmas about 'upholding self' (e.g. self-autonomy, consequences for self-respect, consequences for self-reputation). A third group was about 'upholding other' (e.g. caring for others, respect for others and their rights and autonomy, putting oneself in other's shoes). A final issue was 'upholding relationships' (e.g. maintaining relationships, quality of relationships).

While the previous two classification systems can be interesting to structure a series of dilemmas, Jones' (1991) model is most useful for our purposes because it emphasizes the role of the moral intensity of issues. Within the 'issue-contingent model' it is emphasized that the moral intensity of an issue is one of the most important determinants of ethical decision-making and behaviour. It is a multidimensional concept and its constitutive parts are characteristics of the moral issue such as magnitude of consequences (or harm/benefits done to victims/beneficiaries), social consensus (or degree of social agreement that a proposed act is evil/good), probability of effect, temporal immediacy, proximity (which can be social, cultural, psychological or physical) and concentration of effect (or the number of people

affected). There are at least two reasons why this classification system is the most useful when comparing dilemmas among public and private employees and/or among managers and frontline workers. First, the typology focuses on the seriousness and implications of specific dilemmas. Second, the typology focuses on the significance of the feeling of nearness that the individual has for the effects of his action. Hence, the typology allows to determine whether private/public/semi-public managers and private/public/semi-public frontline workers have to deal with equally difficult, nearby and far-reaching dilemmas. It could for example be possible that public servants have to deal with more serious dilemmas than private sector staff members, which could lead to an entirely different decision-making process (e.g. more life and death decisions in the public sector; see also: Kelley and Elm, 2003).

### **Towards An Extended Model: The (Ethical) Decision-Making Of Street-Level Bureaucrats**

Now that we have the conceptual tools to allow for a comparison, we move to the question of explanation of (ethical) decision-making in public, semi-public and private organizations. As explained above, the empirical research fails to provide insight into the relative impact of these factors and the exact way in which they influence decision-making and behaviour. Both the models of ethical decision-making and street-level bureaucracy theories treat the decision-making process itself largely as a black box. The following part attempts to substantiate that the concept of 'social mechanism' can help to provide insight into the black box of causation. We first define the concept and then address the question how these underlying mechanisms can be observed. The third part uses the concept to present the building blocks for a conceptual framework of the ethical decision-making of street-level bureaucrats.

#### **'Social mechanism' defined**

A social mechanism can be defined as *"a constellation of entities and activities that are linked to one another in such a way that they regularly bring about a particular type of outcome"* (Hedström, 2005). This is, however, but one of the many definitions of the concept. Mahoney (2001) presented a still incomplete list of 24 different definitions by 21 authors. Gerring (2007) identified at least nine different types of meanings of the concept in current social science, of which some may be combined but others are clearly contradictory. George and Bennett (2005) speak of *"ultimately unobservable physical, social, or psychological processes"*. Gambetta (1998) refers to *"complexes of interactions among individuals that underlie and account for aggregate social regularities"*, while Stinchcombe defines 'social mechanism' as: *"(...) a piece of scientific reasoning which is independently verifiable and independently gives rise to theoretical reasoning, which gives knowledge about a component process (generally one with units of analysis at a lower level) of another theory (...)"*. Many other leading scholars in this field (e.g. Boudon, Brady, Coleman, Elster, Hedström, Merton, Steel, Swedberg...), have identified different definitions. We, however, opt for the approach of Pawson and Tilley (1997) who refer to CMO-configurations, linking contextual conditions ("C") in a specific situation with regularly observed outcomes ("O") through several causal mechanisms ("M").

One useful way of providing meaning to the concept “mechanism” is by looking at the wider intellectual movement within which it emerged. The concept has gained importance as part of the development of what has been called the ‘analytical approach of social theory’ (Hedström & Swedberg, 1998). The fundamental ambition of the latter is to provide insight into the black box between two variables of which the correlation has been determined. In this approach one not only attempts to specify that a relationship exists (the classical ‘covering law model’ of Hempel), one also aims to examine exactly why and how this relationship exists (Mayntz, 2004; Hedström & Swedberg, 1998), which Gerring (2007) calls a ‘mechanismic understanding of causation’.

### **The search for ‘social mechanisms’**

Several scholars state that there is a need for the underlying (social) mechanisms of the decision-making process to be revealed. It is important to develop deeper, more fine grained and more fully integrated theories that can explain how and under which conditions discretion is exercised and (ethical) dilemmas are dealt with (Ford & Richardson, 1994; Scott, 1997; Meyers & Vorsanger, 2003). The concept of ‘social mechanism’ can be introduced to distinguish between ‘genuine causality and coincidental association’ (Elster, 1989).

The question of course remains how these social mechanisms can be identified. Bommer et al. (1987) suggest that *“the behaviours of individuals and their interaction with their environments should be systematically observed so as to determine which factors lead to a particular decision.”* As for the actual empirical techniques to enable such systematic observation, we can draw on some recent developments in the methodological writings of George and Bennett (2005), Brady and Collier (2004), Gerring (2006 & 2007) and others. They refer to a specific (mainly qualitative within-case) methodology for the identification of social mechanisms in causal inference, using terms like ‘causal-process observations’, ‘process tracing’, ‘pattern-matching’ and ‘the congruence method’. Process-tracing, for example, can be defined as *“presenting evidence for the existence of several prevalent social practices that, when linked together, produce a chain of causation from one variable to another”* (Steel, 2004). George and Bennett (2005) state that this method, which is often but not exclusively used in historical research, attempts to make causal inferences in situations where controlled comparison is not possible. By tracing the chain of cause-effect relations several intervening mechanisms can be identified and theories about the interaction of causal processes can be developed or tested. They identify various types of process-tracing, depending on the research objectives, going from ‘detailed narrative process-tracing’ or ‘storytelling’ (Steel, 2004) to the less detailed ‘general explanation process-tracing’ (George and Bennett, 2005). A second example is the congruence-method or ‘pattern-matching’. In this method, the investigator attempts to predict the relevant outcome in a particular case on the basis of a specific theory. If the outcome is indeed congruent with the theoretical expectations, there is a higher possibility of a causal relationship (George and Bennett, 2005). Because the researcher does not have to trace the causal process between the independent and dependent variable, the amount of required data is not as high as in the process-tracing method. These and other methods can be used to identify social

mechanisms and, thus, provide insight into the black box between two variables. Bennett and Elman (2006, p. 472) state, however, that *“no method is optimized for every research objective and every domain and none is able to surmount fully the well-known challenges to valid causal inference in non-experimental settings”*.

### **Empirical applications of ‘social mechanisms’**

In the literature many examples of particular mechanisms can be found. A number of these social mechanisms could be relevant for research on the ethical decision-making of street-level bureaucrats, the topic which is addressed in this article. As an illustration, four types of social mechanisms are listed. Merton (1957) developed the concept of ‘middle range theories’, consisting of *“sets of relatively simple ideas, which link together a limited number of facts about the structure and functions of social formations and suggest further observation”* (Merton, 1957: 108). They hold the middle between comprehensive analytical schemes and detailed workday hypotheses. In sociology this led to the identification of several social mechanisms that could explain how people manage to deal with role conflicts (e.g. relative importance of different statuses, power of those in the role-set, observability of behaviour, etc.).

Second, also in psychology, several mechanisms have been identified (Gambetta, 1998), such as cognitive dissonance<sup>1</sup> (Festinger, 1957), the belief-formation mechanism<sup>2</sup> (Hedström & Swedberg, 1998) and the contrast versus endowment effect<sup>3</sup> (Elster, 1998).

Third, in the more psychology oriented part of the ethical decision-making literature, the concept of ‘social mechanism’ has been used as well. The moral approbation model of Jones and Ryan (1997), for example suggests a theoretical link between moral judgment and moral behaviour. As in the tradition of ‘social mechanisms’, it attempts to explain why and under what circumstances moral agents act on their moral judgments. The psychological mechanism ‘moral approbation’ (i.e. the desire for moral approval from oneself or others) is explicitly described to indicate by which factors moral decision-making and behaviour in the organization are affected.

Finally, a small but growing line within this literature also focuses on mechanisms within organizations, using insights from public administration and organizational studies. Dubnick (2005), for example, tried to explain the assumed relationship between accountability and performance, by referring to four types of social mechanisms. This is based on the typology of Trondal (1999) which consists of (1) cognitive, (2) integrative, (3) social interaction and (4) rational-choice mechanisms.

## **Building blocks for a conceptual framework on ethical decision-making of street-level bureaucrats**

Arguably, the social mechanisms above could all be interesting to provide building blocks for a conceptual framework for research on the ethical decision-making among street-level bureaucrats. To substantiate our claim, one type of mechanism is selected on the basis of which a preliminary model is elaborated. We opt for Merton's conception of dealing with role strain. Role theory attempts to explain how and under which circumstances staff members in an organization deal with differing and sometimes even conflicting role expectations (see for example: Merton, 1957; Goode, 1960; Biddle, 1986). Role theorists assume that the behaviour of individuals can (in part) be predicted by referring to their respective social identities and situational factors. As in theatre, individuals perform 'parts' or 'roles' for which 'scripts' were written (Biddle, 1986, p. 68). Scripts can be described as organizationally given role-demands, consisting of "*norms, expectations, taboos, responsibilities and the like (...) associated with a given social position*" (Levinson, 1959, p. 172). They can be associated with several social statuses (e.g. wife, employee, mother, police officer, etc.). Because each person occupies multiple statuses (Linton, 1945) and each social status involves an array of roles<sup>4</sup> with specific scripts, an individual is constantly confronted with various role expectations. These expectations or demands are generated by several sources, consisting of both identifiable persons – e.g. supervisor, colleagues, citizens, the self, etc. (Merton, 1957; Peterson & Smith, 2000) – and less personalized sources (Levinson, 1959; Peterson & Smith, 2000) – e.g. internal guidelines, the law, HRM policy, etc. This combined group of personalized and non-personalized sources of role expectations is the 'role-set'.

The expectations generated in this role-set lead, however, not necessarily to a coherent 'script'. There may be differences or even contradictions between expectations generated by several sources in the role-set, leading to role strain (Goode, 1960). Role theorists have listed several types of role strain, among which role ambiguity, role conflict, role discrepancy and role overload. Role strain can be caused by excessive or contradicting expectations in several social statuses (e.g. mother-role versus employee-role), but also by differing role expectations within one particular status (e.g. various conceptions in the role-set of police officer). Interesting in the context of this article is how these various role expectations (or structurally given demands) impact the way in which street-level bureaucrats deal with ethical dilemmas.

An important observation in role theory is that, despite various tensions, "*(...) it is obvious that humans are not incapacitated by role strain (...)*" (Sieber, 1974, p. 568). This leads us to the question which processes are operative to counteract these strains and under which circumstances they (fail to) operate (Merton, 1957). Several role theorists explicitly described the social (or causal) mechanisms that explain how individuals manage to cope with the (sometimes contradictory) expectations in particular situations. In other words, they explain the way in which role expectations under specific conditions impact the actual role behaviour (e.g. Merton, 1957; Goode, 1960; Hall, 1972; Thornton & Nardi, 1975). At least two main types of particular social mechanisms can be distinguished in role theory.

The first type draws from the fact that contradictions are possible between the actual role expectations (for example written in internal guidelines or expressed by a superior) and the role expectations perceived by those who fulfil the role (Preiss & Ehrlich, 1966). Actual role expectations are, thus, filtered or interpreted in a specific way by individual staff members. This could occur, for example, in an organization with problems of ambiguous communication and a lack of transparency. This specific organizational context could lead to a situation in which the actual role expectations are misinterpreted (alteration) by staff members or in which their attention is falsely focused on just a few role expectations (selection) (Solomon et al., 1985; Preiss & Ehrlich, 1966). Hence, alteration and selection of actual role expectations are two possible mechanisms explaining the difference between actual and perceived role expectations. In a specific ethical dilemma, these (altered or selected) perceived role expectations could impact the way individuals deal with the situation at hand.

A second type of social mechanisms concentrates on the articulation or the emphasis of particular expectations which are generated in the role-set. Superior power of one source in the role-set – for example your immediate boss – could lead to an increased impact of this source of expectations above other sources – for example colleagues (Merton, 1957, p. 113-117; Rose et al., 2000). A possible lack of direct supervision of certain activities by your immediate boss (e.g. police patrols) could, however, decrease the impact of his/her role expectations in a particular situation.

Thus, the second mechanism tries to explain the impact of specific expectations in the role-set, which can be intermediated by the first mechanism that focuses on the difference between actual and perceived expectations.

As illustrated above, role theory and its constituting mechanisms could be interesting for research on ethical decision-making among street-level bureaucrats for at least two reasons. First, it is completely in line with the social mechanism literature by trying to explain the intermediate or underlying causal mechanisms between contextual conditions, on the one hand, and individual behaviour, on the other hand. The idea of searching for middle range theories to attempt explaining how and under which circumstances individual behaviour in organizations is influenced by specific contextual conditions is highly linked to the CMO-configuration approach of Pawson and Tilley (1997). Second, role theory provides a conceptual framework that is general enough to be applied in a variety of research domains, but specific enough to still link it to behaviour of individuals in an organization. Of course, empirical research is needed to further develop the model in order to (1) identify a broader variety of social mechanisms and (2) attempt to apply it in studies that focus on the way frontline officers deal with ethical dilemmas in various contexts. We believe this model could open the door to a new line of research, specifically in the domain of ethical decision-making among street-level bureaucrats, but perhaps also in the more general 'dealing with discretion' research.

Central in this research agenda could be the question how organizational factors impact the decision-making process and the corresponding behaviour of street-level bureaucrats. This question can be addressed in both an inductive and deductive way. Inductive research could be particularly useful for

exploratory purposes to identify social mechanisms, for example in a qualitative, comparative case study. With regard to data collection at least two types of triangulation should then be kept in mind: (1) data source triangulation to make as complete a list as possible of the various – and often contradicting – role expectations from the different sources and (2) within-method triangulation (combination of various qualitative data collection methods, e.g. observation, focus groups and interviews) to aim for a more valid and comprehensive view of frontline ethical decision-making (Denzin, 1970; Thurmond, 2001). The second, more deductive approach, would be particularly useful in domains with more developed theoretical insights, where mechanisms are already known. Then, even experiments could be used to further analyse the mechanisms that form the causal links between several influencing organizational factors and ethical decision-making of street-level bureaucrats. Of course there is also a middle way, aiming at the maximal use of insights in the broad literature on discretion in a qualitative case study approach to refine existing theoretical frameworks.

### **Conclusion And Implications For Future Research**

The topic of 'dealing with discretion' has been explored by many researchers leading to the development of several independent literature traditions. This article focused on two particular lines of research with a clear focus on discretion: (1) the literature on street-level bureaucrats and (2) the literature on ethical decision-making in organizations. Despite their shared attempt to explain individual behaviour and decision-making these two traditions have been developed quite independently. Arguably, they can be integrated and form the basis for further empirical research on (ethical) decision-making of frontline workers.

An overview of the main insights in both the ethical decision-making models and street-level bureaucracy theories not only showed interesting results, but also one serious shortcoming. These theories focus almost exclusively on the identification of influencing factors, but fail to provide insight into the relative impact of these factors and the exact way in which they influence decision-making. In other words, these research traditions consist of factor studies rather than process studies. The decision-making process is often treated as a black box. We argue that the concept of 'social mechanism' provides a means to open the black box. The concept can be used to provide insight into the process of decision-making and to understand the causal link between the explanatory factors on the one hand, and the observed types of (ethical) decision-making on the other and thus go further than a mere list of factors. Social mechanisms that are already identified in role strain theory could be a very useful inspiration and form the essential building blocks for further research on ethical decision-making among street-level bureaucrats.

## Reference List

- Aiken, M. & Hage, J. (1966). Organizational alienation: a comparative analysis. *American Sociological Review*, 31 (4): pp. 497-507.
- Albonetti, C. A. (1991). An integration of theories to explain judicial discretion. *Social Problems*, 38 (2): pp. 247-266.
- Atkinson, D. N. & Newman, D. A. (1970). Judicial attitudes and defendant attributes: some consequences for municipal court decision-making. *Journal of Public Law*, 19: pp. 68-87.
- Bakker, W. & van Waarden, F. (1999). Discretionaire ruimte bij de formulering en handhaving van regelgeving. In W. Bakker & F. van Waarden (Eds.), *Ruimte rond regels. Stijlen rond regulering en beleidsuitvoering vergeleken* (pp. 13-39). Boom: Meppel.
- Baldwin, R. (1995). *Rules and government*. Oxford: Oxford University Press.
- Behn, R. D. (2001). *Rethinking democratic accountability*. Washington D.C.: Brookings Institution Press, 317 p.
- Bennett, A. & Elman, C. (2006). Qualitative research: recent developments in case study methods. *Annual Review of Political Science*, 9 (1): pp. 455-476.
- Biddle, B. (1986). Recent developments in role theory. *Annual Review of Sociology*, 12 (1): pp. 67-92.
- Bøhren, Ø. (1998). The agent's ethics in the principal-agent model. *Journal of Business Ethics*, 17 (7): pp. 745-755.
- Bommer, M., Gratto, C., Gravander, J., & Tuttle, M. (1987). A behavioural model of ethical and unethical decision-making. *Journal of Business Ethics*, 6 (4): pp. 265-280.
- Boston, J. (1995). Inherently governmental functions and the limits to contracting out. In J. Boston (Ed.), *The state under contract* (pp. 78-111). Wellington (New Zealand): Bridget Williams Books Ltd.
- Boulding, K. (1966). The ethics of rational decision. *Management Science*, 12 (6): pp. 161-169.
- Brady, F.N. & Hatch, M.J. (1992). General Causal Models in Business Ethics: An Essay on Colliding Research Traditions. *Journal of Business Ethics*, 11 (4): pp. 307-315.
- Brady, H. E. & Collier, D. (2004). *Rethinking social inquiry. Diverse tools, shared standards*. Lanham: Rowman and Littlefield Publishers, 362 p.
- Brehm, J. & Gates, S. (1997). *Working, shirking, and sabotage: bureaucratic response to a democratic public*. Ann Harbor: University of Michigan Press, 270 p.
- Brigham, J. & Brown, D. W. (1980). *Policy implementation: penalties or incentives*. Beverly Hills: Sage, 271 p.
- Broderick, J. (1977). *Police in a time of change*. Prospect Heights: Waveland Press.
- Brodkin, E. Z. (1997). Inside the welfare contract: discretion and accountability in state welfare administration. *Social Service Review*, 71 (1): pp. 1-33.
- Brown, M. K. (1981). *Working the street: police discretion and the dilemmas of reform*. New York: Russell Sage Foundation, 349 p.
- Cooper, T. (1998). *The responsible administrator: an approach to ethics for the administrative role*. San Francisco: Jossey-Bass, 278 p.

- Cooper, T. (2001). *Handbook of administrative ethics*. New York: Dekker, 763 p.
- Davis, K. C. (1969). *Discretionary justice: a preliminary inquiry*. Baton Rouge: Louisiana State University Press, 233 p.
- Denzin, N.K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago: Aldine.
- Deutsch, K. (1985). On theory and research in innovation. In R. Merrit & A. Merrit (Eds.), *Innovation in the public sector* (pp. 17-35). Beverly Hills: Sage.
- Dhami, M. K. (2003). Psychological models of professional decision-making. *Psychological Science*, 14 (2): pp. 175-180.
- Dubnick, M. (2005). Accountability and the promise of performance. In search of the mechanisms. *Public performance and management review*, 28 (3): pp. 376-417.
- Dworkin, R. M. (1977). *Taking rights seriously*. Cambridge: Harvard University Press, 371 p.
- Edwards, G. C. (1980). *Implementing public policy*. Washington DC: Congressional Quarterly Press.
- Ellis, K., Davis, A., & Rummery, K. (1999). Needs assessment, street-level bureaucracy and the new community care. *Social Policy and Administration*, 33 (3): pp. 262-280.
- Elster, J. (1989). *Nuts and bolts for the social sciences*. Cambridge: Cambridge University Press, 184 p.
- Elster, J. (1998). A plea for mechanisms. In P. Hedström & R. Swedberg (Eds.), *Social mechanisms. An analytical approach to social theory* (pp. 45-73). Cambridge: Cambridge University Press.
- Farrell, R. A. & Swigert, V. (1978). Prior offence as a self-fulfilling prophecy. *Law and Society Review*, 12 (3): pp. 437-453.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford: Stanford University Press, 291 p.
- Ferrell, M. Z. & Ferrell, O. C. (1982). Role-set configuration and opportunity as predictors of unethical behaviour in organizations. *Human Relations*, 35 (7): pp. 587-604.
- Ferrell, O. C. & Gresham, L. G. (1985). A contingency framework for understanding ethical decision-making in marketing. *Journal of Marketing*, 49 (3): pp. 87-96.
- Fineman, S. (1998). Street-level Bureaucrats and the Social Construction of Environmental Control. *Organization Studies*, 19 (6): pp. 953-974.
- Ford, R. C. & Richardson, W. D. (1994). Ethical decision-making: a review of the empirical literature. *Journal of Business Ethics*, 13 (3): pp. 205-221.
- Fritzsche, D. J. & Becker, H. (1983). Ethical behaviour of marketing managers. *Journal of Business Ethics*, 2 (4): pp. 291-299.
- Fritzsche, D. J. (1991). A model of decision-making incorporating ethical values. *Journal of Business Ethics*, 10 (11): pp. 841-852.
- Fyfe, J. J. (1979). Administrative interventions on police shooting discretion: an empirical examination. *Journal of Criminal Justice*, 7 (4): pp. 322.
- Galligan, D. J. (1990). *Discretionary powers: a legal study of official discretion*. Oxford: Clarendon Press, 401 p.

- Gambetta, D. (1998). Concatenations of mechanisms. In P. Hedström & R. Swedberg (Eds.), *Social mechanisms. An analytical approach to social theory* (pp. 102-124). Cambridge: Cambridge University Press.
- George, A. L. & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge: MIT Press, 331 p.
- Gerring, J. (2006). *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press, 278 p.
- Gerring, J. (2007). The mechanistic worldview: Thinking inside the box. *British Journal of Political Sciences*, 38 (1): pp. 161-179.
- Goode, W. (1960). A theory of role strain. *American Sociological Review*, 25 (4): pp. 483-496.
- Goodsell, C. (1980). Client evaluation of three welfare programs. *Administration and Society*, 12 (2): pp. 123-136.
- Goodsell, C. (1981). Looking once again at human service bureaucracy. *Journal of Politics*, 43 (3): pp. 763-778.
- Green, E. (1961). *Judicial attitudes in sentencing: a study of the factors underlying the sentencing practice of the criminal court in Philadelphia*. London: Macmillan, 149 p.
- Grossman, S. J. & Hart, O. D. (1983). An analysis of the principal-agent problem. *Econometrica*, 51 (1): pp. 7-45.
- Hagan, J. (1974). Extra-legal attributes and criminal sentencing: an assessment of a sociological viewpoint. *Law and Society Review*, 8 (3): pp. 357-383.
- Hagan, J., Nagel, I. H., & Albonetti, C. A. (1980). The differential sentencing of white-collar offenders in ten federal district courts. *American Sociological Review*, 45 (5): pp. 802-820.
- Hall, D. (1972). A model of coping with role conflict: the role behaviour of college educated women. *Administrative Science Quarterly*, 17 (4): pp. 471-486.
- Handler, J. F. (1986). *The conditions of discretion: autonomy, community, bureaucracy*. New York: Russell Sage Foundation, 327 p.
- Hasenfield, Y. & Steinmetz, D. (1981). Client-official encounters in social service agencies. In C. Goodsell (Ed.), *The public encounter: where state and citizen meet* (pp. 83-101). Bloomington: Indiana University Press.
- Hasenfield, Y. (1983). *Human service organizations*. Englewood Cliffs: Prentice-Hall, 276 p.
- Hawkins, K. (1992). *The uses of discretion*. Oxford: Clarendon Press, 431 p.
- Hawkins, K. (1984). *Environment and enforcement. Regulation and the social definition of pollution*. Oxford: Clarendon, 253 p.
- Hedström, P. & Swedberg, R. (1998). Social mechanisms: an introductory essay. In P. Hedström & R. Swedberg (Eds.), *Social mechanisms. An analytical approach to social theory* (pp. 1-31). Cambridge: Cambridge University Press.
- Hedström, P. (2005). *Dissecting the social: on the principles of analytical sociology*. Cambridge: Cambridge University Press, 177 p.

- Hjern, B. & Porter, D. O. (1981). Implementation structures: a new unit of administrative analysis. *Organization Studies*, 2 (3): pp. 211-227.
- Hunt, S. D. & Vitell, S. J. (1986). A general theory of marketing ethics. *Journal of Macromarketing*, 6 (1): pp. 5-16.
- Hunt, S. D. & Vitell, S. J. (2006). The general theory of marketing ethics: a revision and three questions. *Journal of Macromarketing*, 26 (2): pp. 143-153.
- Hupe, P. & Hill, M. (2007). Street-level bureaucracy and public accountability. *Public administration*, 85 (2): pp. 279-299.
- Jones, T. M. & Ryan, L. V. (1997). The link between ethical judgment and action in organizations: a moral approbation approach. *Organization Science*, 8 (6): pp. 663-680.
- Jones, T. M. (1991). Ethical decision-making by individuals in organizations: an issue-contingent model. *Academy of Management Review*, 16 (2): pp. 366-395.
- Jowell, J. (1973). The legal control of administrative discretion. *Public Law*, pp. 178-220.
- Kagan, R. (1994). Regulatory enforcement. In D. Rosenbloom & R. Schwartz (Eds.), *Handbook of regulation and administrative law* (pp. 383-422). New York: Marcel Dekker Inc.
- Kaptein, M. & Wempe, J. (2002). *The balanced company. A theory of corporate integrity*. Oxford: Oxford University Press, 344 p.
- Kaptein, M. (2001). Integrity management of police organizations. *Policing: an international journal of police strategies and management*, 24 (3): pp. 281-300.
- Kelley, P. C. & Elm, D. R. (2003). The effect of context on moral intensity of ethical issues: revising Jones's issue-contingent model. *Journal of Business Ethics*, 48 (2): pp. 139-154.
- Kelly, M. (1994). Theories of justice and street-level discretion. *Journal of Public Administration Research and Theory*, 4 (2): pp. 119-140.
- Kohlberg, L. (1969). Stage and sequence: the cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-380). Chicago: Rand McNally.
- Kohlberg, L. (1984). *The philosophy of moral development: moral stages and the idea of justice*. San Francisco: Harper and Row, 441 p.
- Koolhaas, E. (1990). Milieu, handhavingsstrategieën en beleid. *Justitiële Verkenningen*, 3: pp. 92-109.
- Kroeger, N. (1975). Bureaucracy, social exchange, and benefits received in a public assistance agency. *Social Problems*, 23 (2): pp. 182-196.
- Levinson, D. (1959). Role, personality, and social structure in the organizational setting. *Journal of Abnormal Psychology*, 58 (2): pp. 170-180.
- Lincoln, Y. (1985). *Organization theory and inquiry: the paradigm revolution*. Beverly Hills: Sage, 231 p.
- Linder, S. & Peters, B. G. (1987). A design perspective on policy implementation: the fallacies of misplaced prescription. *Policy Studies Review*, 6 (3): pp. 459-476.
- Linton, R. (1945). *The Cultural Background of Personality*. New York: Appleton, Century, Crofts.

- Lipsky, M. (1980). *Street-level bureaucracy: dilemmas of the individual in public services*. New York: Russell Sage Foundation, 244 p.
- Loe, T. W., Ferrel, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision-making in business. *Journal of Business Ethics*, 25 (3): pp. 185-204.
- Maesschalck, J. (2005). *Een ambtelijk integriteitsbeleid in de Vlaamse overheid*. Leuven: Steunpunt Beleidsrelevant Onderzoek Bestuurlijke Organisatie Vlaanderen, 150 p.
- Mahoney, J. (2001). Review essay: Beyond correlational analysis: recent innovations in theory and method. *Sociological Forum*, 16 (3): pp. 575-593.
- Maynard-Moody, S. & Musheno, M. (2003). *Cops, teachers, counsellors: narratives of street-level judgment*. Ann Arbor: University of Michigan Press, 221 p.
- Mayntz, R. (2004). Mechanisms in the analysis of social macro-phenomena. *Philosophy of the Social Sciences*, 34 (2): pp. 237-259.
- Merton, R. K. (1957). The role-set: problems in sociological theory. *The British Journal of Sociology*, 8 (2): pp. 106-120.
- Meyers, M. K. & Vorsanger, S. (2003). Street-level bureaucrats and the implementation of public policy. In B. G. Peters & J. Pierre (Eds.), *Handbook of Public Administration* (pp. 245-255). London: Sage Publications.
- Miethe, T. D. & Moore, C. A. (1986). Racial differences in criminal processing: the consequences of model selection on conclusions about differential treatment. *The sociological quarterly*, 27 (2): pp. 217.
- Miller, G. A. (1967). Professionals in bureaucracy: alienation among industrial scientists and engineers. *American Sociological Review*, 32 (5): pp. 755-768.
- Moore, S.T. (1987). The theory of street-level bureaucracy. *Administration and Society*, 19 (1): pp. 74-94.
- Nielsen, V. L. (2006). Are street-level bureaucrats compelled or enticed to cope. *Public administration*, 84 (4): pp. 861-889.
- Pawson, R. & Tilley, N. (1997). *Realistic evaluation*. London: Sage.
- Perry, J. L. & Rainey, H. G. (1988). The public-private distinction in organization theory: a critique and research strategy. *The Academy of Management Review*, 13 (2): pp. 182-201.
- Peterson, M. & Smith, P. (2000). Sources of meaning, organizations and culture. Making sense of organizational events. In N. Ashkanasy, C. Wilderom & M. Peterson (Eds.). *Handbook of Organizational Culture and Climate* (pp. 101-115). London: Sage.
- Peyrot, M. (1982). Caseload management: choosing suitable clients in a community health clinic agency. *Social Problems*, 30 (2): pp. 157-167.
- Preiss, J. & Ehrlich, H. (1966). *An examination of role theory. The case of the State Police*. Lincoln: University of Nebraska Press.
- Prenzler, T. (2004). The privatization of policing. In R. Sarre & J. Tomaino (Eds.), *Key issues in criminal justice* (pp. 267-296). Adelaide: Australian Humanities Press.

- Prottas, J. M. (1979). *People-processing: the street-level bureaucrat in public service bureaucracies*. Lexington: Heath.
- Rainey, H. G. (2004). Big science, big bureaucracy and privatization: Complications in contracting for the management of the Brookhaven National Laboratory. *Public performance and management review*, 28 (2): pp. 214-235.
- Rainey, H. G. & Bozeman, B. (2000). Comparing public and private organizations: empirical research and the power of the a-priori. *Journal of Public Administration Research and Theory*, 10 (2): pp. 447-470.
- Rest, J. R. (1984). The major components of morality. In W. Kurtiness & J. Gewirtz (Eds.), *Morality, moral behaviour, and moral development* (pp. 24-40). New York: Wiley.
- Rogers, E. & Joung-Imkim (1985). Diffusion of innovation in public organizations. In R. Merrit & A. Merrit (Eds.), *Innovation in the public sector* ( Beverly Hills: Sage.
- Rose, G., Kahle, L. & Shokam, A. (2000). Role relaxation and organizational culture. A social values perspective. In N. Ashkanasy, C. Wilderom & M. Peterson (Eds.). *Handbook of Organizational*
- Sabatier, P. & Mazmanian, D. (1979). The conditions of effective implementation: a guide to accomplishing policy objectives. *Policy Analysis*, 5 (4): pp. 481-504.
- Sandfort, J. R. (2000). Moving beyond discretion and outcomes: examining public management from the frontlines of the welfare system. *Journal of Public Administration Research and Theory*, 10 (4): pp. 729-756.
- Sappington, D. E. M. (1991). Incentives in principal-agent relationships. *Journal of Economic Perspectives*, 5 (2): pp. 45-66.
- Satyamurti, C. (1981). *Occupational survival. The case of the local authority social worker*. Oxford: Blackwell, 216 p.
- Scott, P. G. (1997). Assessing determinants of bureaucratic discretion: an experiment in street-level decision-making. *Journal of Public Administration Research and Theory*, 7 (1): pp. 35-57.
- Sieber, S. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39 (4): pp. 567-578.
- Sims, R. L. & Keon, T. L. (1999). Determinants of ethical decision making: the relationship of the perceived organizational environment. *Journal of Business Ethics*, 19 (4): pp. 393-401.
- Smith, D. A. (1986). The plea bargaining controversy. *The Journal of Criminal Law and Criminology*, 77 (3): pp. 949-968.
- Smith, S. R. (2003). Street-level bureaucracy and public policy. In B. G. Peters & J. Pierre (Eds.), *Handbook of Public Administration* (pp. 354-365). London: Sage Publications.
- Solomon, M. R., Surprenant, C., Czepiel, J. A. & Gutman, E. G. (1985). A role theory perspective on dyadic interactions: the service encounter. *Journal of Marketing*, 49 (1): pp. 99-111.
- Spohn, C., Gruhl, J., & Welch, S. (1982). The effect of race on sentencing: a re-examination of an unsettled question. *Law and Society Review*, 16 (1): pp. 71-88.

- Stead, E. W., Worrell, D. L., & Stead, J. G. (1990). An integrative model for understanding and managing ethical behaviour in business organizations. *Journal of Business Ethics*, 9 (3): pp. 233-242.
- Steel, D. (2004). Social mechanisms and causal inference. *Philosophy of the Social Sciences*, 34 (1): pp. 55-78.
- Terpstra, J. & Havinga, T. (1999). Uitvoering tussen traditie en management. Structuratie en stijlen van beleidsuitvoering. In W. Bakker & F. van Waarden (Eds.), *Ruimte rond regels. Stijlen rond regulering en beleidsuitvoering vergeleken* (pp. 40-67). Boom: Meppel.
- Thompson, V. A. (1975). *Without sympathy or enthusiasm: the problem of administrative compassion*. Alabama: University of Alabama Press, 137 p.
- Thomson, R. J. & Zingraff, M. T. (1981). Detecting sentence disparity: some problems and evidence. *American Journal of Sociology*, 86 (4): pp. 869-880.
- Thong, J. Y. L. & Yap, C.-S. (1998). Testing an ethical decision-making theory: the case of shoplifting. *Journal of Management Information Systems*, 15 (1): pp. 213-237.
- Thornton, R. & Nardi, P. (1975). The dynamics of role acquisition. *The American Journal of Sociology*, 80 (4): pp. 870-885.
- Thurmond, V. (2001). The point of triangulation. *Journal of Nursing Scholarship*, 33 (3): 253-258.
- Treviño, L. K. & Weaver, G. R. (2003). *Managing ethics in business organizations: social scientific perspective*. Stanford: Stanford Business Books, 364 p.
- Treviño, L. K. (1986). Ethical decision-making in organizations: a person-situation interactionist model. *Academy of Management Review*, 11 (3): pp. 601-617.
- Trondal, J. (1999). Unpacking social mechanisms. Comparing social constructivism and organization theory perspectives. *ARENA Working Papers*, 99/31.
- Velasquez, M. G. & Rostankowski, C. (1985). *Ethics: Theory and Practice*. New Jersey: Prentice Hall, 512 p.
- Vermillion, L. J., Lassar, W. M., & Winsor, R. D. (2002). The Hunt-Vitell general theory of marketing ethics: can it enhance our understanding of principal-agent relationships in channels of distribution? *Journal of Business Ethics*, 41 (3): pp. 267-285.
- Vinzant, J. C. & Crothers, L. (1998). *Street-level leadership. Discretion and legitimacy in front-line public service*. Washington: Georgetown University Press, 185 p.
- Wark, G. R. & Krebs, D. L. (2000). The construction of moral dilemmas in everyday life. *Journal of Moral Education*, 29 (1): pp. 5-21.
- Wasserman, H. (1971). The professional social worker in a bureaucracy. *Social Work*, 16 (1): pp. 89-96.
- Waterman, R. W. & Meier, K. J. (1998). Principal-agent models: an expansion? *Journal of Public Administration Research and Theory*, 8 (2): pp. 173-202.
- Weick, K. E. (1979). *The social psychology of organizing*. New York: McGraw-Hill, 294 p.
- Wilson, J. Q. (1968). *Varieties of police behaviour. The management of law and order in eight communities*. Cambridge: Harvard University Press, 309 p.

- Winter, S. C. (2001). Reconsidering street-level bureaucracy theory: from identifying to explaining coping behaviour: *Paper for the Annual Meeting of the Association of Policy Analysis and Management (1-3 November, 2001)*. Washington DC: Danish National Institute of Social Research.
- Winter, S. C. (2003). Implementation perspectives: status and reconsideration. In B. G. Peters & J. Pierre (Eds.), *Handbook of Public Administration* (pp. 212-222). London: Sage Publications.
- Wittmer, D. P. (2001). Ethical decision-making. In T. Cooper (Ed.), *Handbook of administrative ethics* (pp. 481-507). New York: Dekker.

## End Notes

---

<sup>1</sup> *“The theory on cognitive dissonance predicts a counterintuitive result. On the one hand, the greater the awareness of the negative aspects of the system, the greater the likelihood of speaking up against it; however, since the greater the awareness, the greater the dissonance, if people do not speak up, the theory predicts the opposite effect namely that correspondingly more intense will be the activity to justify the existing arrangement.”* (Gambetta, 1998)

<sup>2</sup> *“The belief-formation mechanism states that the number of individuals who perform a certain act signal to others the likely value or necessity of the act, and the signal will influence other individual’s choice or action (e.g. self-fulfilling prophecy).”* (Hedström & Swedberg, 1998)

<sup>3</sup> Endowment means that *“a good past tends to improve the present, a bad past to make it worse”* (Elster, 1998). Contrast refers to the fact that *“a good experience in the past tends to devalue less good experiences in the present, and a bad event in the past will similarly throw the present into favourable relief”* (Elster, 1998 & 2007). The net effect can be positive or negative.

<sup>4</sup> E.g. in the social status of police officer an individual can perform several roles, for example the role of colleague, the role of subordinate, the role of mediator, etc.