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Social Mechanisms of Corruption: Analytical Sociology and Its Applicability to Corruption Research*

Abstract: By applying a bribery model, this paper will deal with those constellations of conditions and activities by actors that are capable of explaining corrupt behavior in economic and sociological theory. Some of these explanations reveal the properties of ‘social mechanisms’ in the sense of analytical sociology (AS). Both disciplines suggest and test the mechanisms of corruption. By taking into consideration the link between monitoring and the frequency of corruption, for example, this paper shows that the proposed way of explaining corrupt behavior using AS offers the opportunity to test counteracting mechanisms. A monitoring mechanism which refers to deterrence may lead to less corruption but may also strengthen an already existing bond of trust between corruption partners. Thus, the trust mechanism may counteract the impact of deterrence and pave the way for new corrupt activities.

1. Introduction

Corruption is a social phenomenon that is seldom visible and is difficult to measure (Philp 2006, 50). Since it is a societal threat, theoretical discussions tackle this phenomenon with enthusiasm but, due to the lack of first-hand data, seldom produce substantial results. Although it is increasingly discussed in literature, there is not yet a comprehensive, original theory about corruption. Theoretical ideas about the emergence or curbing of corruption are borrowed from general theoretical paradigms. Different academic disciplines analyze corrupt practices in their own paradigmatic ways (Jancsics 2014) but these are, for the most part, without common theoretical points of reference. As a consequence, theoretical and empirical results remain separated, and each is expressed in the nearly incommensurable jargon of the respective discipline. This suggests that significant differences in definitions also exist due to these differences between the disciplines (Johnston 1996; Mikkelsen 2013). This problem is aggravated by normative ideas about corruption that are directly related to a country’s system of law. The scope of meaning is defined by changes in the law over time, both in historic developments (Scott 1972) and also in the more recent past. In

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Germany, for instance, the understanding of corruption as a penal offence has expanded from offences that pertain only to public officials, to ones which occur within the private business sector (Wolf/Schmidt-Pfister 2010).

Most contributions to corruption research belong to economics and the social sciences (Jain 2001). Therefore, a theoretical framework that is able to incorporate most of the theoretical and empirical findings within a common research perspective may be beneficial when specific issues arise that cannot be tackled by one scientific paradigm alone. Within roughly the last 15 years, Analytical Sociology (AS) has emerged as a new “reform movement within sociology and social theory” (Hedström/Ylikoski 2014, 60). This discipline is one that may be capable of integrating the research perspectives and findings of both social science and economics. AS “[...] is in fact a set of research guidelines for both theoretical model building and empirical model testing” (Manzo 2014, 7). As such, it is not a theory in and of itself but may serve as a general theoretical foundation for analyzing corruption. One of the central focuses of AS is the postulation of ‘social mechanisms’ that are crucial for the explanation of social phenomena (such as corruption). Evidently, different scientific disciplines identify and name different mechanisms. They also differ in the way they refer to specific context conditions and in which aspects of corrupt transactions are considered. In terms of AS, the disciplines vary in their modeling of corrupt activities and in their reference to the macro conditions.

In order to scrutinize the potential of AS as a foundation for research on corruption in both economics and the social science, my point of departure will be a model of corruption that refers to the behavior of bribery. By applying this model, several mechanisms, which have been put forward by researchers within different disciplines as ways of explaining corruption, can be characterized. Since the model of corruption can also be described in terms of AS, the application of social mechanisms to corruption research might reduce the aforementioned incommensurability.

So as to maintain a focus, this paper will deal mainly with those economic and sociological theories that are compatible with the AS approach. The main body of the paper is organized as follows. The second section presents the model of corruption that refers to bribery. The third section looks at whether the principles of AS allow for the integration of different positions in corruption research. By drawing on empirical material, the fourth section approves some of the suggestions provided in the previous sections. The fifth section presents the conclusions.

2. A Corruption Model

One way of reducing the problems of the heterogeneous treatment of corruption, both in its definition and in its analysis, is to refer to bribery as a common form of corruption. Broad definitions that aim at incorporating several forms of corruption often include bribery of public officials as a typical form of corruption. Examples of such definitions include the one given by the World Bank (2014)

which pertains to “the abuse of public office for private gain”, or Transparency International’s (2014) definition of corruption as “the abuse of entrusted power for private gain”. Even authors who consider bribery merely as a “specific” form of corruption (Mikkelsen 2013, 368) would label it as corrupt behavior. Whether other deviant actions, such as embezzlement or fraud, belong to corruption crimes is also disputed (Graeff 2005).

In order to conceptualize this idea of bribery, I will refer to a model by Banfield (1975) who describes corruption with reference to three actors. Within this model, corruption is defined by the formal relationship between the three actors and their actions. An ‘agent’ is a public official who in conjunction with a third person abuses his office for private gain. A ‘principal’ (usually a superior or some abstract entity such as the state) has endowed the agent with administrative leeway and power. The third actor, the ‘client’, bribes the agent in order to receive a favor at the expense of (or contrary to the directives of) the principal.

Corruption is considered in this model as an exchange process between the actors. Since the agent belongs to a public administration, the exchanged goods or services are not usually tradable on regular markets (Banfield 1975, 599). The principal grants decisional leeway to the agent, which he/she then abuses in order to get an advantage for the client. The client reciprocates the bribe in exchange for this advantage. As a framework, this model leaves open the questions of who is represented by the client and whether those represented are persons, political parties, or another organization.

Reading the approach by Banfield (1975, 588) in an economic sense leads to several suggestions for curbing corruption. Corruption will occur with the least frequency if agents are hired based on their degree of law abidance and if agents are rewarded for norm-compliant actions and punished for norm violations. Clear rule prescriptions provided by the principal are necessary for agents to be able to act in the interests of the principal. Higher payments to agents would reduce the incentive for corrupt practices, which is of particular importance as public officials earn fixed salaries and are usually unable to change their income simply by working extra hours in the office. Monitoring the agent’s work—in the sense of economic contract theory—is essential for maintaining non-corrupt practices within the office. Banfield (1975, 588) suggests a scenario in which monitoring supervisors are themselves monitored by a central authority—though he was well aware of the unrealistic notion of this proposition.

Fitting with other economic approaches to crime (such as that of Becker 1968), the Banfield model suggests a negative relationship between the probability of disclosure of corrupt practices and the frequency of incidences of corruption. Due to its higher monitoring capability, a central authority would be more successful at curbing corruption than decentralized organizations would.

Banfield (1975) considers corruption as a phenomenon that is inherent in public administration. One major reason is that public provision is only possible if private subcontractors are hired. Best practice processes for selecting the subcontractors reduce transaction costs on the one hand but also lead to corrupt relationships on the other. Another reason is that corrupt relationships result from public tendering. In the Banfield model, the social links within corrupt

practices are considered in relation to the clients, who must not belong to the administrative organizations. According to this, a broader interpretation of the model—although most probably not intended by Banfield—allows for at least two driving forces of corruption: the administration, and the private offenders (clients) who use bribery for their own interest. If bribery is to succeed, the agent's abuse of administrative power needs to match with the client's interests.

Given the fact that the relationship between agent and client is also the natural connection between the actor who offers the bribe and the actor who accepts it, the Banfield model seems to be adequate as a theoretical point of departure for describing bribery as a central form of corruption. In this theoretical perspective, bribery is an indicator that the agent does not follow the rules of the principal. An economic interpretation, according to contract theory, would be that the working relationship between the agent and the principal is not sufficiently determined, as the agent should receive his/her payment from the principal, but not from third persons. Economists would consider the client to be more efficient at monitoring the agent than the principal is. The agent and the principal are working in public office and should by definition be acting in the public interest and not for private gain. The public interest seldom matches with the client's interests. The client is therefore not a proper actor for monitoring the agent's work. Monitoring tasks must still remain with the principal even if he is less efficient than the client. This problem cannot be solved within public administrations (Banfield 1975).

So far I have stressed some economic interpretations of bribery within the Banfield model. The economic perspective tries to reduce corruption by improving the contractual relationship between principal and agent with regard to efficiency. However, the exchange between agent and client—the core action of corruption—happens without contract. It seems that the economic interpretation might be missing some aspects; it does not, for instance, say much about which exchange conditions may be crucial for explaining *why* corruption happens between client and agent. A blunt application of the principle of utility maximization would merely imply that a successful corruption exchange is an indicator of the fact that expected benefits are higher than expected costs.

A sociological interpretation of a bribery scenario in which the Banfield model applies, stresses the situational conditions of the corruption opportunities and the social relationship between agent and client (Graeff 2005). The most relevant characteristics of the situations involving bribery are: a) the liberty to accept or reject an offer of corruption; b) the threat that the corruption partners could be punished if their deal is revealed; and c) the absence of opportunities to legally sue the corruption partner if he/she does not deliver the good or service he/she promised in exchange (Lambsdorff 2007). Corruption is considered as a crime and typically both agent and client are aware of this. They conduct their corrupt practices clandestinely so that they are not discovered, particularly by the principal. Any one of the corruption partners has to decide whether they want to deal with the other. If they do, they have to ensure that the other will actually deliver his promised goods or services. They cannot go to court in order to get their share out of the corruption deal.

While the economic perspectives focus on the principal-agent relationship, the sociological perspective focuses on the action problems of the agent-client relationship. Given the deliberate decisions described above, an agent or a client would only be willing to offer or to accept a bribe if he/she can assume that the other corruption partner will conduct his part of the deal with fairness (Graeff 2010). Being fair includes keeping the secrecy of the corruption deal and delivering the promised goods and services. In a broader sense, this fairness is a form of specific reciprocity that is typical for relationships of trust (Baurmann 2005) or relationships that are effectively driven by norms. From a sociological point of view, one might expect corrupt deals if corrupt partners trust each other or if they know that corrupt deals are typically run in a certain situation and people behave according to a corruption norm. As will be explained below, the latter case reduces the risk of corruption in a similar way that trust does. Whatever the foundation of fairness in corruption exchanges is, it is always a characteristic of the social relationship between the agent and the client as long as the corruption partners are aware of the fact that what they are doing is morally and legally reprehensible. Fairness denotes the fair treatment of the exchange partner at the expense of others who are treated unfairly. There is reciprocity between the partners, which excludes others from this kind of reciprocity.

Interpersonal trust is the foundation of the above-mentioned forms of reciprocity and fairness (Baurmann 2005). According to most scholars, trust includes, at the very least, the trustor giving up control of his/her actions or resources in favor of the trustee and that this loss of control carries a risk (see for example, Coleman 1990; Deutsch 1973). Since both the agent and the client are unable to secure their deal by way of externally enforced contracts and each must keep his or her promise in order to gain the overall benefit of the corrupt exchange, they must necessarily give up control. Risk enters the situation not only by way of the threat of being discovered but also through the possibility of being betrayed by the corruption partner. This may be one reason for the fact that many corruption partners have known each other for a long time (Graeff 2005). Subsequently, many corruption networks consist of members who know each other well or are relatives, and who meet up with each other outside of business (Ashforth/Anand 2003).

Corruption deals based on interpersonal trust are exchanges that contradict universalistic norms and also typically laws. They are conducted because the agent and the client derive their trust from their faith in their partner's reliability. If the agent and the client do not know each other, corruption norms may work as a substitute for the knowledge and the reliability of the corruption partner. Such a corruption norm—a rule for behaving corruptly in a certain situation—may refer to illegal actions. This does not render it illegitimate. Some corruption norms correspond to expectations which apply when dealing with public authorities; this is particularly so in poor countries. “Speed money” is an example of such a payment as it can become a usual part of administrative processes if higher ranking public officials do not interfere (Kaufmann/Shang-Jin 1999). If a client knows that he/she can ‘speed up’ administrative processes because agents usually take such a payment, particular knowledge of the corrup-

tion partner is no longer necessary. Potential corruption partners know that they ‘should’ behave according to this norm in certain situations. Corruption norms exist in a nexus of normative expectations in which they stand in opposition to existing legal rules. They occur in contradiction to legal norms, sometimes because they make administrative processes easier. The administrative services are not tradable on regular markets. Potential for corruption exists if there is, for instance, an administrative rule that burdens an administrative process for both the agent and the client, and if the agent is able to bend or ignore that rule. Administrative obstacles are, therefore, considered as sources of corrupt practices. If there is a mutual expectation that the rule can usually be bent, the norm to do so has removed the negative externality of the rule.

One might argue that the emergence of norms, in particular the emergence of corruption norms in an administrative environment, is an attempt at reconciling particularistic and universalistic interests (see for instance, Smelser 1971). This perspective may be misleading because corruption norms aim at favoring particularistic interests (those of the client and the agent) at the expense of the interests of the principal and others (these interests are usually considered as “universalistic”—see Schweitzer 2009). Systemic corruption—a situation in which corruption norms are pervasive—goes hand in hand with severe flaws within the legal system, an absence of the rule of law, and the motivation of the rulers to maintain opportunities for private gain. The main characteristic of corruption norms is that they favor certain groups or people by contradicting universalistic rules which would usually benefit the majority of the ‘others’.

In summary, there are at least two theoretical perspectives on the Banfield model that may work as descriptions of the characteristic of bribery: an economic one and a sociological one. Both can be taken as ‘wide’ Rational Choice (RCT) models (Opp 1999, 2013a). The actors are aware of the opportunities of their actions and decide based on their preferences in order to maximize their outcomes. Both are theoretical propositions about the actions of corrupt actors with a focus on their micro-relationships.

The following section deals with the question of whether this core model of corruption can be integrated into the theoretical framework of Analytical Sociology. This question essentially means that a certain notion of ‘explanation’ is applied that is distinct from several others in the social sciences.

3. Analytical Sociology and the Explanation by ‘Social Mechanisms’

Before returning to the topic of corruption, the essentials of Analytical Sociology (AS) will be presented. The AS approach can be separated from other theoretical and paradigmatic perspectives in the social sciences. Research concepts and definitions should be formulated in clear terms (Manzo 2014, 7) in order to avoid obscurity and the dilution of empirical by operationalization. Theoretical model building and its empirical scrutinizing play an equal role in the research process.

As a consequence, sociological ‘storytelling’ or purely normative approaches are dismissed. In AS, middle-range theories in the Merton (1967) sense are preferred.

Explaining social phenomena, which is the aim of social science, is in AS tantamount to looking for a mechanism that bridges the gap between cause and effect. Social mechanisms are a suggestion that there is a causal influence on why certain events take place (Elster 1989, 3). For this, former events must be identified as a cause that is capable of regularly bringing about the resulting events. For researchers who apply the analytical sociology agenda, it is necessary (according to Hedström/Bearman 2009, 5) to “identify component parts that jointly produce the collective outcome to be explained”. The notion of mechanisms tightly refers to the philosophical debate around that term (e.g. Machamer/Darden/Craver 2000). Hedström (2008, 321) states:

“[...] Mechanisms can be said to consist of entities (with their properties) and the activities that these entities engage in, either by themselves or in concert with other entities. These activities bring about change, and the type of change brought about depends upon the properties and activities of the entities and the relations between them. A mechanism, thus defined, refers to a constellation of entities and activities that are organized such that they regularly bring about a particular type of outcome, and we explain an observed outcome by referring to the mechanism by which such outcomes are regularly brought about.”

Since researchers are dealing with social content, the *outcome* of a mechanism is a social phenomenon or a social effect. The effect or phenomenon is brought about by the mechanism *regularly* (Maurer 2010, 181). This also implies a *causal notion* of the process by which the ‘entities’ generate this effect or phenomenon. ‘Entities’, such as actors or individuals, cause a social phenomenon or effect due to their actions, properties, and relations. These are considered as a *structure* of the mechanism-based perspective within the social effect or phenomenon. Explaining social effects or phenomena is typically a *hierarchical* process in which mechanisms at the micro-level are considered in conjunction with properties of macro-structures, such as the conditions of individuals or actors.

Most of these basic assumptions within AS can be found both in economics and sociology. Economic analyses of corruption refer, however, exclusively to an agent-model of corruption (for instance, in game theory) or to a macro-perspective in which the frequency of corruption between countries or regions is empirically compared. Any mechanisms which are taken to explain corruption using the economic agent theory are formalized in the mathematical sense and come with a strong *ceteris paribus* condition in which all situational conditions are assumed to balance each other out.

Take the economic interpretation of the Banfield model as an example. More monitoring of the activities of the principal or others would reduce the corrupt activities of the agent, *ceteris paribus*; so too would higher salaries (due to higher opportunity costs). Such *ceteris paribus* explanations might disregard the importance of influential factors outside the model. They are, however,

singular statements about the causal relationships between the activities of actors. Within the economic interpretation of the Banfield approach, singular statements embedded in theoretical foundations become mechanisms if the constellation of actors (entities) and their activities (postulated in theory) bring about a particular type of outcome, namely corruption. The relationship between singular statements and theories is made clearer by Opp (2013a, 52) who states that “[. . .] mechanisms are not full-fledged explanations. They consist of a sequence of singular statements. Mechanisms become full-fledged explanations when theories are applied.”

Moreover, mechanism-based explanations presuppose that the causal effect will regularly occur (Maurer 2010). This is equivalent, in theory, to elucidating the reasons why actors consent to specific rules in a certain situation or, at least in part, why actors are motivated to follow specific rules in a certain situation. One could also assume a set of rules that drives the behavior of actors (Schmid 2006, 22). Those sets of rules that imply certain actions can be considered as mechanisms when they create formal or informal institutional conditions for actors.

In this vein, economic propositions about the relationship between the degrees of monitoring or payments and corrupt practices, for example, may count as singular statements about mechanisms. The assumptions (which are often not explicitly mentioned) under which these mechanisms are applied, such as utility maximization or rational decision-making, are part of the underlying economic theory. The theory incorporates general statements, which suggest causal effects related to the singular statements or as Ylikoski (2013, 387) puts it: “A singular causal claim can only be justified by a generalization if that generalization is itself causal.”

In a sociological interpretation of the Banfield model, norms and trust are, theoretically, necessary conditions for entering into a risky situation of corruption of one’s own choosing. Still, actors are identical to entities; their activities regularly bring about corruption. The singular statements of the sociological mechanisms are straightforward: increasing the impact of corruption norms or strengthening interpersonal trust between (potential) corruption partners would result in higher incidences of corruption (Graeff 2005).

Hedström and Ylikoski (2014, 53) consider the economic way of providing explanations as “storytelling”. In contrast to this, an AS explanation would incorporate theoretical propositions within a macro-micro-macro link (Hedström/Bear-

man 2009, 9). As a theoretical foundation, AS refers to “structural individualism” as “[. . .] a methodological doctrine according to which all social facts, their structure and change, are in principle explicable in terms of individuals, their properties, actions, and relations to one another” (Hedström/Bearman 2009, 6).

Evidently, this proposition allows for the analysis of interesting theoretical implications such as the effects on the macro level caused by actors who did not intend to bring about these effects. This is of importance to corruption research because pervasive corruption—the preponderance of particularistic decisions at the level of actors—might stand in contrast to effects of positive social

capital institutions (such as social trust) and their universalistic benefits to society (Tinggard-Svendsen 2014). Moreover, “the realism and the precision of the proposed explanation will be greatly improved if we take certain macro-level properties such as relational structures as given and incorporate them in the explanation” (Hedström/Bearman 2009, 10).

It is not a loss of rigor and clarity if collective properties on the macro level are defined in AS as being everything feasible and relevant for the actors on the micro level. Such properties contain, for instance, commonly shared attitudes or aggregate characteristics, such as unequal income patterns. The macrostructures provide points of orientation for actors when they are deciding on possible actions, either by providing clear facts which can be accounted for by individuals or by initiating social processes that run in the background. In a similar way, a rather unclear legal system or a weak rule of law may be an incentive for potential corruption partners to plan and conduct corrupt deals. In turn, if people behave in a norm-oriented manner and obey the law, this may happen without deliberation but can effectively drive the absence of corrupt practices. Even if the macrostructures account for a good part of the explanation, the explanatory process always runs from the bottom up. Inferences are drawn by referring to the level of the actors up to the macro level. This is done because the macro-level factors themselves are seldom relevant when it comes to explaining the occurrence of macro-level outcomes. As such, AS proposes a research perspective that incorporates micro- and macrostructures with a clear focus on actor-level processes (Hedström/Bearman 2009, 13).

4. One Step Further: The Opportunity to Test Counteracting Mechanisms

One advantage of subsuming mechanisms from economics and sociology within the AS perspective would be that it augments the analysis of a social phenomenon. In this way, it would be possible to refine explanations and to elucidate mechanisms which work as opposing forces. Given that the AS approach stresses the explicit testing of theories, the development of theories would be advanced by referring to empirical results.

As long as the action and theoretical foundations of the sociological and economic analysis of corruption are similar, mechanisms may be compared by referring to their singular statements. In this way, one can discover in the Banfield approach a payment mechanism that is based on the economic rationale of opportunity cost or trust, and norm mechanisms that refer to the preferences of personal obligation or norm obedience. As a particular example, consider a monitoring mechanism which relates to the aforementioned relationship between the monitoring of agents and the frequency of corrupt activities. In a cross-country comparison depicting general societal conditions, factors such as a free press or the efficiency of monitoring institutions might have a significant influence on the occurrence of corruption (Bardhan 2002; Lessmann/Markwart 2010). From a more microeconomic-related perspective, effective monitoring may influence cor-

ruption in conjunction with a condign punishment (Becker/Stigler 1977). Based on the assumption that the monitoring actors will not themselves fall prey to corrupt inclinations (Laffont/Guessan 1999), one would hypothesize that the more extensively an agent is monitored, the less likely is it that he/she will engage in corrupt practices.

A sociological analysis of corruption in which trust drives the actions between agent and client would imply a partially different conclusion. Arguably, the leeway given to the agent (and the client, respectively) is reduced incrementally where monitoring is used. In this way, their corrupt activities will actually be obstructed and prevented if planning processes are also affected. Since total surveillance of the agent is neither possible nor useful, unless the work is undertaken by the principal him/herself, some scope for the agent to abuse his/her position would remain. Put another way, the costs of eradicating corruption completely are too high. As a consequence there is always potential for corrupt deals to occur, even if administrative reforms are successful in reducing their likelihood (Johnston 1998). One gateway for corruption is a private relationship between agent and client which allows for the development of trust. This trust can work as a foundation for the decision to favor particularistic interests over universalistic ones. This would allow potential corruption partners to offer or to accept a bribe as long as no corruption norm already suggests doing so.

Typically, monitoring activities are applied if corruption is already rampant in an organization to such an extent that it compromises its legitimacy (Pfarrer et al. 2008). If there are still corrupt relationships existing between an agent and a client, increasing the level of monitoring decreases the cost of maintaining the deal. An external threat reinforces the private relationship between agent and client. This also contributes to the success of a corrupt deal and may pave the way for more corrupt deals between the agent and the client.

Improving the monitoring activities might have different effects depending on the status of the (private) relationship between agent and client. Existing corruption networks might be encouraged if monitoring activities increase, even if their scope is reduced. The monitoring mechanism could be adversely affected by another mechanism that rests on trust.

Hence, a sociological approach would have a different perspective on the measures needed to curb corruption than that found in classical economic paradigms (Becker 1968; Becker/Stigler 1977). Actors are driven by private obligations within a corrupt relationship. They favor the particularistic norm or agreement in this corrupt relationship over universalistic norms, compliance directives, or laws. As a consequence, it might be more effective to strengthen the universalistic norms and contribute to their internalization than to administer deterrence measures. Norms of general fairness or explicit anti-corruption norms are valid even if there is a relationship of trust between agent and client.

It may be a strength of AS that these contradictory effects become visible (possibly due to its focus on mechanisms). Different scientific paradigms may become commensurable in their perspective on the same phenomenon if their mechanisms are considered. This might also contribute to making AS amenable to empirical research. Testing the mechanisms is the ultimate goal of AS. As

Hedström and Ylikoski (2014, 52) state: “As it is possible that similar effects can be produced by a number of different (known or unknown) mechanisms, a crucial element in any mechanism-based explanation of empirical facts is the collection of empirical evidence about the assumed entities, activities, relations, etc.”

5. Empirical Applications

With the exception of agent-based simulations, empirical corruption studies from economics and sociology have yet to explicitly pick up the AS approach. However, there are several empirical studies on corruption which are related to the general notion of AS and the analyzing of mechanism-like causal propositions, even though they do not apply AS terminology. First and foremost in this category are empirical studies applying RCT.

A good example might be game-theoretical studies in which corrupt exchanges can be modelled as interactions between players. Such studies are highly suitable for testing the mechanism-like causal propositions of corruption. They also fit within the principal-agent-client model setting, as persons being tested assume one of these roles during the game. Studies on the corruptibility of players were among the first laboratory studies conducted by economists (such as Frank/Schulze 2000; Abbink/Irlenbusch/Renner 2002). Explicit exchange interactions, such as gifts versus bribes, were elucidated in more recent studies (Frank/Lambsdorff 2010).

Empirical studies about the impact of monitoring in game-theoretical research settings have come up with mixed results. Schulze and Frank (2003) equate monitoring with the risk of being detected. They conducted an experiment in which student test persons were monitored either in a situation that involved corruption or one which did not. By comparing the results of the treatment groups, Schulze and Frank concluded that monitoring reduces corrupt activities due to providing deterrence. In their experimental setting, monitoring also reduced the intrinsic motivation for honesty (Frey 1997). Schulze and Frank (2003, 146) suggest that monitoring implies that the principal does not trust the agent. This might lead to unexpected effects such as fewer test subjects refusing to take the bribe. Contrasting the results and the experimental setting by Schulze and Frank (2003), Barr, Lindelow and Serneels (2009) conducted an experiment about the conditions and the impact of monitoring in a game in which players could take up the role of service providers or monitors. They found that monitoring effectively reduces corrupt activities of service providers (which are measured in the game as the degree of embezzlement). Their results also support the findings of Abbink, Irlenbusch and Renner (2002).

One may doubt whether experimental studies achieve enough external validity for the results to be generalized. In game settings, test persons (mostly students) consider corrupt activities within an artificial situation in which their ‘crimes’ have no real consequences (e.g. legal prosecution). Armantier and Boly (2012, 139) reviewed several experimental corruption studies with regard to ex-

ternal validity and came up with “encouraging, although not definite” conclusions. Due to the artificial experimental conditions, there was “a lack of external validity”. From an AS perspective, however, one can defend those experiments by stating that internal validity is more important for analysing mechanism-like propositions than external validity.

A vignette-based factorial survey study allows for combining high internal validity with a decent degree of external validity (Aguinis/Bradley 2014). In one such web-based study by Graeff et al. (2014), vignettes were used to test the influence of both RCT elements and norms on engaging in a corrupt situation. In these vignettes, students had to decide whether they would abuse the position of assistant in order to provide an illegal favor to a fellow student. According to the classical economic paradigm (Becker 1968; Becker/Stigler 1977), the impact of benefits and costs (and the probability of their occurrence) were experimentally varied. With regard to monitoring, two interesting results were found: higher risks reduced corrupt activities significantly; however, the social norms against corruption did so to an even greater extent. Therefore, curbing corruption through monitoring and sanctioning might be less effective than stimulating social norms against corruption or strengthening the validity of (universalistic) fairness norms.

What all of the studies mentioned above have in common, is that they deal with the problems in the context of a sensitive research topic. This might lead to untruthful answers from respondents or to inappropriate behavior from people participating in corruption games. These general drawbacks of corruption research do not pertain to the question of how mechanism-like causal propositions are revealed in empirical applications. In most game-theoretical applications, these propositions are only observable through their effects. But, evidently, they could also be scrutinized if the elements of their singular statements were directly measured, as shown in the study by Graeff et al. (2014).

In addition to these classical methodological approaches of experiments and surveys, AS proposes, in particular, agent-based models (Hedström/Manzo 2015, 179–180): “They simulate the behavior of interdependent agents who are endowed with various kinds of attributes and behavioral rules. Typically, simulation is employed to examine the collective outcomes that agents bring about when they act and interact over extended periods of time.” Agent-based models are the exceptions in corruption research as they have explicitly picked up the AS approach. They attempt to overcome some constraints of game-theory studies (such as the modeling of simple dynamic interactions) by considering many influencing factors and their combination for the emergence of complex social processes. A recent example of such a study is Voinea (2013), who applied a simulation model that dealt with the emergence of corruption. Based on very specific assumptions, Voinea identified the attitude change of agents as a generative mechanism for corruption. Even if the model links theoretically to a multitude of theories from different disciplines (such as psychology and sociology), she dismissed several major determinants, such as risk, in her analysis. While Voinea borrowed from psychological theories in order to model the corruption mechanisms (e.g. from the theory of cognitive dissonance), the

agent-based simulation by Gutierrez-Garcia and Rodriguez (2014) refers to beliefs, desires, and intentions of agents in order to model macro-level corruption patterns. Their results reproduce the endogenous effects of increasing corruption but also the corruption-decreasing effect of anticorruption measures.

Agent-based simulations come with the advantage of linking the micro- and the macro-levels. They are capable of modeling the dynamic processes on the micro level that lead eventually to the emergent social phenomenon on the macro level. Depending on the modeling and its assumptions, one could overcome theoretical limitations, which do not receive empirical support (as is the case with assumptions of the narrow RCT). Despite these advantages, there are also potential drawbacks. Epstein (2011) argues that models may lack factors that are important for social properties of simulated agents if model designers do not correctly consider the properties of the individual in relation to the properties of the (macro-) context. Helbing and Balmelli (2012, 52) point out that some social phenomena need “a more integrated treatment of interactions between many agents”. This may be especially true for corruption research referring to simulations, due to the fact that there is a special social link between corruption partners who conceal their actions and non-corrupt agents who are ignorant victims. If the modeling of micro-dynamics is incorrect, predictions about the emergence or the prevalence of corruption, as provided for by the model, are flawed. This is due to the model’s low validity (and/or reliability).

To sum up, even if the operationalization of the mechanisms is a major aim of AS, little evidence has so far been derived from mechanisms in corruption research. Counteracting mechanisms have not been tested at all. Ideally, mechanisms scrutinized by classical methods such as game-theory experiments or survey-based studies should be replicated not only in different cross-unit studies but also in longitudinal studies. Since causal inference is a goal within AS (Hedström 2008), one should refer to longitudinal study designs that cover all analytical levels, such as micro, meso, and macro designs (Pötter/Blossfeld 2001).

6. Conclusion

When scholars are convinced about their theoretical foundations and implications, they look to approve them and try to find empirical evidence to support them. Typically, this is done within the scientific paradigm of a certain discipline by merely testing the main proposition. This proposition is (most of time) conceivable as a mechanism within the AS research program. As has been shown before, this could be done if the theoretical foundations fulfill the AS requirements: the postulated entities (such as the actors) and their activities must be identified, and it must be certain that their specific constellation regularly brings about a predicted outcome. If these requirements exist, AS suggests a strategy for analyzing a social phenomenon so that explanations are complete in the sense that no “black boxes” are left (Hedström/Swedberg 1996; Boudon 2003). The AS approach can also be considered as an opportunity to integrate theoretical and empirical results from different disciplines. It therefore allows for an analy-

sis of the impact of different, sometimes even counteracting, mechanisms. Such evidently contradictory results would stimulate further scientific research. Even if AS is unable to provide a coherent theoretical basis for corruption itself, its focus on mechanisms may contribute to explanations that could be accepted by other scientific disciplines. This may be true not least because relationships and the exchanges between actors are the focus of both corruption research *and* of AS: “[. . .] Social relations are central for explaining why, acting as they do, individuals bring about the social outcomes.” (Hedström/Bearman 2009, 9) Legal systems consider corruption as a crime that does not occur accidentally. Causal explanations, as proposed within AS, imply a potential for changing a social phenomenon if the empirical analysis shows that deliberately conducted actions were correctly depicted. The explanatory procedure in AS would imply that these social phenomena occur as a result of actions, in that they regularly occur if the social mechanisms are accomplished. However, as Michael Schmid (2010, 57) has asserted, this might be true despite the fact that a successful test of an AS model does not necessarily imply that test results can be replicated. The concern within AS for rigor and conceptual precision and clarity might be an asset when the causal factors of the occurrence and the curbing of corruption are considered. In this way, explanations in AS are contrary to sociological approaches such as ‘post-modern’ theories or system theories that do not apply ‘causal’ explanations.

How strongly AS differs from the classical and modern approaches of RCT is an open question that is beyond the scope of this paper. For corruption research, the differences between AS and RCT seem at first to be small, particularly if the wider RCT is applied (Opp 1999). Hedström and Ylikoski (2014, 57) state that “[. . .] analytical sociology shares an historical lineage with the sociological rational-choice tradition [. . .]”. This may become especially visible when corruption and the aforementioned empirical studies are considered.

There is an ongoing debate (Opp 2013a; 2013b; Ylikoski 2013) about the question of whether explanations in analytical sociology are tantamount to applying the covering-law theory (or HO-scheme, Hempel/Oppenheim 1948). In a broader sense, this discussion also pertains to causality and the notion of ‘laws’ in the social sciences. Adherents of AS try to distance themselves from RCT by rejecting the validity of the covering-law theory as a foundation for scientific explanations (Hedström/Swedberg 1996, 287; Hedström/Ylikoski 2010). By arguing that mechanism-based explanations in AS demand theoretical propositions as specified in the explanans of the HO scheme, Opp (2013a, 52) also reduces the differences between RCT and AS, as follows: “The argument that the HO-scheme is not applicable to causal processes is therefore not tenable. On the contrary, causality in a mechanism explanation can only be established if laws are applied.” The term ‘law’ may be used here broadly to refer to the sense of general, causal-like statements. The differences between RCT and AS are also being blurred because there are no modern scholars left in any discipline, whether in economics or in sociology, who apply a strong version of RCT. The strong version of RCT refers to one in which preferences are completely ordered and transitive, and actors know all relevant information and are able to select

the optimal action in order to maximize utility. The discussion around these differences is not yet completed. In a recent paper, Hedström and Ylikoski (2014, 68) point out the meta-theoretical differences and the distinct destination route of the approaches. They argue that principles of rationality must not have a privileged explanatory status. This implies that RCT explanations are too narrow and that the meta-theoretical tradition of RCT “[. . .] denies the centrality of empirically plausible theories”. For corruption research the controversy between adherents of AS and RCT could be beneficial as it refines the methodological positions. If mechanisms are identified in the course of the debate that could not be subsumed among the wide RCT paradigm, the empirical approval of these may enrich corruption research.

Clearly, there are also limitations to when AS can be suggested as a strategy for corruption research. Due to the fact that (estimated) corruption data for cross-country comparison are freely available, many studies refer solely to macro data and are therefore not suitable for AS. When they conduct cross-country comparisons, however, most researchers do have an actor model in mind. They transfer mechanisms to the macro level and test them with aggregated data (see for instance, Dahlström/Lapuente/Teorell 2010).

Many definitions of corruption are broad and do not match the AS criteria for model setting. Therefore, one critical response to this paper would be that the AS approach, when applied to corruption research, is too narrow and leaves too much out of the discussion that might be worth discussing. Typically this criticism will be raised by theorists who argue normatively, for example those who want to approve the negative consequences of corruption, or theorists who want to subsume a lot of social phenomena, including blackmail or other inappropriate behavior by public officials, within the term corruption. AS adherents prefer clear definitions and try to avoid vague formulations (Manzo 2010, 53). In particular, the definitions should deliver something that can be made amenable to empirical research and can be tested.

The focus on mechanistic explanations may show the external validity of AS when more complex mechanisms are scrutinized. Corruption research may be a good example of this as there are counteracting mechanisms that could be considered as long as the specific theoretical background of the scientific disciplines match the AS requirements. AS then becomes a trans-disciplinary research strategy that may help to reduce the inhibitory ‘jargon’ used within a scientific discipline for cross-disciplinary analysis. Admittedly, there may still be differing ideas about the terms and concepts. Take interpersonal trust as an example. The scope of understanding of this term includes basic contradicting features. Risk and uncertainty are the crucial elements of trust in most concepts within the social sciences (Rousseau et al. 1998, 394) but are not crucial to economic concepts (Akerlof 1970). The differences also pertain to various ideas and assumptions about the way trust is given to others and the principles of utility maximization (Williamson 1993; Ripperger 1998).

Even though it may not solve the problems related to defining the research terms such as corruption, the focus on mechanisms may in this case help to clarify the direction of presumed effects. Considered in this way, mechanisms are not

“full-fledge explanations” (Opp 2013a) but causal chains that pertain to all forms of social coordination. Given that corruption research is taking place within different scientific disciplines and the fact that AS is not designed to refer to a specific scientific field, AS may, despite these challenges, be a general approach for successfully tackling this topic. As Hedström and Ylikoski (2014, 63) put it: “The consistent realist attitude requires that those theoretical assumptions that have a central explanatory role should be both empirically valid and compatible with the results of other scientific fields.”

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