

# Cognitive basis for corruption and attitudes towards corruption in organizations viewed from a structuralist adult developmental meta-perspective

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**ABSTRACT**

The paper focuses on corruption and attitudes towards corruption in organizations. It proposes an interdisciplinary framework for reassessing them. It is argued that an integrative theoretical and analytical framework based on the Model of Hierarchical Complexity (MHC) can provide new insights on corruption. Furthermore the proposed framework offers new theoretical horizons for understanding and evaluating public and scientific discourses on corruption. This approach compensates for frequent shortcomings and disciplinary reductionisms in large parts of the social science literature on corruption. It can thus offer a substantially new outlook on the field of behavioral ethics in organizations based on a meta-systematic theory integration.

**KEYWORDS:** corruption, unethical behavior, behavioral ethics, adult development, complexity, action logics, stages, moral development, theoretical integration, contextualization

The present paper is motivated by a number of surprising, puzzling observations about present theorizing about corruption – and the desire to resolve them. In a nutshell, our primary theoretical motivation is to account for the plurality of strikingly different and sometimes even contradictory perspectives that important social sciences disciplines currently dealing with corruption take onto the phenomenon, and to propose a theoretical framework which is comprehensive enough to bridge those differences. Moreover, we claim that the Model of Hierarchical Complexity (MHC, see below) is able to integrate the contributions that each disciplinary perspective has to make, in order to provide a more complex and more differentiated understanding of corruption. The remainder of this introduction will explain our observations, our interpretation, our motivation and the approach that resulted from those observations and interpretations in some more detail.

Behavioral ethics in general, as well as corruption (as an important form of unethical behavior) in particular have gained increasing public and scholarly interest during the last decades. The number of publications on the topic has grown rapidly, not only in the field of behavioral ethics (Treviño, Weaver & Reynolds, 2006), but also in almost all major social sciences (Grüne & Slanička, 2010; Heidenheimer & Johnston, 2007; Jain, 2001). This

influx of attention, we suggest, is a product and an expression of two general cultural trends in most western societies. The two cultural trends are:

1. A general cultural and political sensitization for ethical questions and,
2. An increasing self-reflexivity of both sciences and societies in many respects.

However, depending on which disciplinary lens is being used, the abundant literature on corruption varies greatly in perspective, focus and evaluation of the phenomena. Luo (2004) even speaks of “fundamentally different paradigmatic perspectives” through which each discipline dealing with corruption looks at the issue. Besides the field of Behavioral Ethics, which is strongly influenced by psychological research, corruption in (and outside) organizations has so far been studied from historical, sociological and anthropological perspectives, to name only the most important ones (see Fein & Weibler, this issue). At the same time, convincing interdisciplinary syntheses remain rare. Overarching analytical categories are almost completely missing. This has resulted in disciplinary reductionisms and widespread theoretical and analytical shortcomings. Some of this can also be spotted within the field of behavioral ethics in organizations and its outlooks on corruption. The present article attempts to account for some of these shortcomings by questioning how these problems can be solved and how the differences and contradictions between and within the disciplinary approaches can eventually be bridged.

Author note: The authors wish to thank Michael Lampton Commons (Harvard Medical School), Sara Nora Ross and Cory Barker (both Antioch University McGregor) for critical comments and helpful advice during the revision of this article, as well as Cory Barker and Charu Tara Tuladhar (Dare Institute) for support with editing it.

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Fein & Weibler (2014) reviewed literature on corruption and found substantially different understandings of corruption not only in different social contexts and in different times, but also in different scientific cultures. They pointed out that a considerable number of contributions to current academic discourse on corruption choose analytical perspectives that are narrower than necessary to understand the complexity of corruption adequately. The following paragraph summarizes the most important results of our (non-exhaustive) literature review with respect to the structural complexity and the degree of self-reflexivity of the articles considered.

### Paradigmatic shortcomings in organizational behavior (OB), behavioral ethics (BE) and management studies (MS) literature

Note that the principal criticisms mentioned below are not substantially new and have been raised many times, especially with respect to some parts of quantitative research, which is why we limit ourselves to rather short statements in this regard.

*a) Constructing plain variables out of complex phenomena.* By this we mean approaches which build single, and often too simple variables out of complex real life phenomena, as for example to describe and quantify “situational” (Rabl 2011) or “institutional” influences (von Maravic, 2007a) on corrupt behavior or that of the “overall working atmosphere” (Chang & Lai, 2002). Of course, factors such as the size of bribes, time pressure and the degree of abstractness of the business code can be isolated and quantified (as in Rabl, 2011), but by making similar choices, other, potentially, equally or even more relevant factors are left out of the analysis, often for practical reasons. This critique is related to the next one.

*b) Too small number of variables.* Generally, human behavior is influenced by complex webs of (internal and external) factors and by the dynamics of their interrelations. Therefore, at least from a meta-systematic perspective (see below), it appears highly insufficient to reduce the explanation of behavior to, say, two single variables. However, singling out and quantifying individual factors from a given context and making statements in the sense that one was able to explain the respective behavior on these grounds is still a widespread scientific practice. However, in our view, this academic habit is more instructive than the respective researcher’s cognitive/analytic perspective than it actually illuminates the object under research.

*c) Overexaggeration of linear assumptions of causality between variables.* After variables have been identified, operationalized and their statistical values quantified, research designs often use quite simple, linear descriptions of (at least indirectly assumed) causal relations between the variables (Venard & Hanafi, 2007; Beugré, 2010; Pelletier & Bligh, 2006; Lange, 2009; Rabl, 2011; Aguilera & Vadera, 2008; Shadnam & Lawrence, 2011). Even though authors might acknowledge (on the basis of thorough statistical analysis) that causal relations between variables are complex and/or not as straightforwardly discernable as hypothesized before, and even though they might be conscious of the fact that the explanatory scope of their findings is limited due to the constraints mentioned above, linear causation still seems to have a great appeal to many researchers. This might be because linear formulations of causation between

variables always implicitly create the impression of expressing quasi-natural laws – and thus being more “objective” by reporting “pure scientific truths” with regard to the matter in question – while more complex, qualitative explorations into the respective context or phenomenon are often left open “to future research”.

*d) Neglecting subjective dimensions.* As already mentioned above, (quantitative) research interested in supposedly clear causal relationships often tends to leave out those dimensions of the respective phenomenon which are “difficult to access” or at least difficult to operationalize and/or quantify. Very often, this argument applies to the empirical reality of individual actors’ motivations, i.e. the latter are either left out of the analysis or reduced to simplified assumptions instead of being explored empirically (Luo, 2004; Shadnam & Lawrence, 2011). In our view, it is clear that on these grounds, no “holistic view” of human behavior is possible.

*e) Missing integration of dimensions and perspectives.* Finally, as reported in Fein & Weibler (this issue), a number of authors do stress the interdependence between various dimensions of corruption and, therefore, the importance of integrating perspectives. Some even make more concrete suggestions for future research in this regard. However, ultimately, only a small portion of the articles reviewed actually come close to meeting these demands themselves. Of course, a lack of interdisciplinarity can hardly be reproached to single research papers from single disciplines. Anyhow, since the fields considered here and, in more detail, in Fein & Weibler (this issue) are themselves already more or less interdisciplinary endeavors, we consider it legitimate to address certain reductionisms, as we see them. So when giving examples in the previous paragraph, we thereby do not claim that the authors working and writing within the respective traditions are doing “bad research”, but we do claim that the underlying patterns of thought are often less complex than desirable. Moreover, our argument is that in combination, all of the shortcomings listed here can be seen as results of particular epistemological paradigms which correspond to particular levels of complexity of analytic perspective taking which, in our view, are not sufficient in view of an encompassing understanding and explanation of corruption, because they are too narrow to grasp its complexity and dynamics. In order to go beyond these limitations, we wish to introduce the Model of Hierarchical Complexity as a tool for analyzing and measuring the complexity of both empirical phenomena of corruption and our way of understanding and conceiving of those phenomena (attitudes towards corruption).

### Intention of the current paper

To counter the problems and shortcomings mentioned above and, in more detail, by Fein & Weibler (2014), we offer a synergistic, interdisciplinary framework based on, on the one hand, questions and findings from various other social sciences, and, on the other hand, a theoretical explanatory model suggesting abstract criteria for analyzing and evaluating corrupt behavior itself and the discourse dealing with it. Focusing on the inherent patterns of structural complexity of both physical and discursive behavior, we thereby expand on and tie up with Ross & Commons’ basic paper on political development (2008), as well as with Treviño,

Weaver, and Reynolds' (2006) claim that cognitive developmental dimensions have "clear implications for behavioral ethics in organizations". Moreover, we argue that adult developmental perspectives, namely the Model of Hierarchical Complexity (MHC; Commons 2009; Commons, Sinnott, Richards, Armon 1989; Commons, Armon, Kohlberg, Richards, Grotzer, & Sinnott, 1990; Levinson, 1986; Marchand 2002) can provide content-free analytic tools and thus introduce more complexity and analytical rigor into the study of corruption in organizations.

By adult development research, we mean different strands of structuralist scholarship on the development of cognitive and other mental capacities and competences inspired by pioneers like Baldwin, Mead, Piaget and others, claiming – and providing empirical evidence for the fact that the development of cognition and other aspects of mind does not stop after adolescence, but can continue in adulthood, even though in many cases it does not for structural and contextual reasons. This has strong, yet still largely underestimated consequences not only for social, political and economic life in general, but also for human behavior in organizations and, on this basis, the functioning of organizations, including states, on micro, meso, and macro levels.

In this paper, we focus on the *Model of Hierarchical Complexity* (MHC), a mathematics-based general stage model developed since the late 1970's and early 1980's by Michael L. Commons, Francis Richards and others (Commons, 2008; Commons & Richards, 1984a; Commons & Richards, 1984b; Ross & Commons, 2008). By its nature as a content-free general model, the MHC accounts for the developmental content-based stage progressions in over 33 currently known developmental models, among them that of moral judgment by Lawrence Kohlberg which is widely acknowledged and discussed within the field of behavioral ethics (see for example Treviño, Weaver & Reynolds' review, 2006). Using the MHC, structurally different forms of corruption can be identified according to their inherent level of complexity. Furthermore, the structural complexity of ways of dealing with and of theorizing about corruption becomes visible so that theoretical and practical anti-corruption activities can be better adjusted to the nature of the problems.

We make two claims on this basis. First is that explaining corrupt behavior in terms of the development of structural complexity can lead to a better understanding of where ethical and unethical behavior as discussed in the literature on organizational behavior, behavioral ethics and management studies (OB/BE/MS). We can explain why behaviors themselves and attitudes towards corruption differ tremendously in different (scientific and organizational) cultures and contexts, and why the dominant, supposedly "generally accepted" notions of (un-) ethical or corrupt behavior in mainstream western culture and science must not be generalized. We can also explain why their unconscious projection on other contexts may lead to counterproductive results. Second, we claim that re-evaluating the plurality of current theorizing about corruption according to its inherent patterns of structural complexity can help to overcome disciplinary reductionisms and thus push behavioral ethics research into new meta-theoretical or paradigmatic insights. Doing so can substantially advance the field in both theoretical and analytical respect.

The present article primarily focuses on demonstrating the theoretical contributions to be gained by a more systematic use of adult development perspectives on corruption. Even though we also spell out some important practical implications of the approach proposed here, and provide a number of empirical examples, a more detailed discussion of how the MHC can be applied on different aspects of corruption research is beyond the limits of this paper.

The following article first briefly presents the Model of Hierarchical Complexity, which we propose as a theoretical lens to support a more complex, more integrative, and thus more effective corruption analysis. The remainder of the article is made up of two main substantial parts, devoted to a more detailed account and consideration of the implications of applying the MHC to corruption analysis, research and practice. The first of those sections focuses on how to analyze corruption itself with the MHC; the second section offers a meta-theoretical framework for re-evaluating scientific and political discourses about corruption. The paper closes with a general discussion of the findings and concluding remarks.

## » PRESENTATION OF THE MODEL OF HIERARCHICAL COMPLEXITY

The Model of Hierarchical Complexity (MHC) is a model in mathematical psychology developed by Michael Commons since the 1980's (Commons, Trudeau, Stein, Richards, and Krause, 1998) on the basis of an earlier version, the General Stage Model (Commons and Richards, 1984a, 1984b). The following summary is adapted from the Introduction to the MHC in *World Futures* (Commons 2008). Permission to use the passages quoted here has been requested from the author. It is a quantitative behavioral developmental theory offering a standard method for examining universal patterns of evolution and development both in humans and in broader natural and social contexts. As a quantitative model, it accounts for the developmental content-based stage progressions evident in over 33 currently known structuralist developmental models by using more abstract terms and definitions than the former. Among the models included by the MHC are Jean Piaget's model of cognitive development, Robert Selman's model of the development of social perspective taking, Kohlberg's model of moral development and various models of self and identity development, to name only those which appear most important for understanding and analyzing corruption.

With those more domain-specific developmental models, the MHC shares the idea that complexity development can be defined as progression within a non-arbitrary hierarchical sequence of increasingly complex stages of performance by which the behaviors observed in the respective domains of development are ordered. This means that actions at a higher order of hierarchical complexity:

- a) are themselves defined in terms of actions at the next lower or earlier order of hierarchical complexity (creating a hierarchy of increasingly complex actions that may be taken),
- b) organize and transform the lower-order actions
- c) produce new kinds of organizations out of lower-order actions in a non-arbitrary way.

**Table 1.** Stages of hierarchical complexity according to the MHC

Order of stage	Possible operations and competences and their results	
15	Cross-paradigmatic	Coordinates and crosses paradigms, builds new fields of knowledge (consisting of two or more paradigms)
14	Paradigmatic	Coordinates, integrates and synthesizes meta-systems (fields of knowledge), builds paradigms, requires high degree of decentration
13	Meta-systematic	Compares and coordinates various systems, builds meta-systems out of disparate systems, as well as meta-theories (theories about theories)
12	Systematic	Multiple relations between abstract variables, considers relationships in contexts (→ building systems)
11	Formal	Coordinates two abstract variables, calculates the influence of one variable on another one, solves problems with one unknown using algebra, 1-dimensional linear logic (if-then) and empiricism
10	Abstract	Builds abstract concepts and variables out of finite classes of concrete phenomena (time, place, act, actor, state, type), makes and quantifies propositions: logical quantification (quantifiers: all, none, some), categorical statements/stereotypes (e.G. "We all die")
9	Concrete	Full complex arithmetic (long division, short division), 2. Person perspective: takes and coordinates perspective of other and self, follows complex social rules, forms cliques, plans reasonable deals, conceives history and geography
8	Primary	Simple logical deduction and empirical rules involving time sequence, simple arithmetic (adds, subtracts, multiplies, divides, counts, proves), does series of tasks on its own
7	Pre-operational	Simple deductions, tells stories, counts events and objects up to 5, combines numbers and simple propositions, connects the dots, follows lists of sequential acts
6	Sentential	Chains words (coordinates words and names), imitates and acquires sentences and sequences; follows short sequential acts, pronounces numbers in correct order, acquires pronouns: subject (i), object (me), possessive adjective (my), possessive pronoun (mine), and reflexive (myself) for various persons (i, you, he, she, it, we, y'all, they)
5	Nominal	Uses words and names for things (coordinates and relates concepts), single words: exclamations, verbs, nouns, number names, letter names
4	Sensory-motor	Responds to stimuli in a class successfully and non-stochastically, forms simple concepts, morphemes (coordinates schemes)
3	Circular sensory-motor	Schemes (touch, grab, shake objects, circular babble, ...), coordinates perceptions and movements, forms open-ended proper classes, phonemes, archiphonemes
2	Sensory or motor	Discriminates in a rote fashion, stimuli generalization, perceives and views objects or moves; moves limbs, lips, toes, eyes, elbows, head
1	Automatic	Engages in one action at a time. Cellular activities: sensing, effecting
0	Calculatory	Exact computation only, no generalization, human-made programs manipulate 0, 1; not 2 or 3

The next higher order actions thus cannot be accomplished by the respective lower-order actions alone. Rather, the higher-order action coordinates the actions of the next lower order by a mechanism with a higher degree of efficiency. "Thus, *hierarchical complexity* refers to the number of recursions that the coordinating actions must perform on a set of primary elements" (Commons, 2008) (see table below).

As a formal theory for scoring the complexity of behaviors, the MHC quantifies the orders of hierarchical complexity of tasks based on mathematical principles of how information is organized. The model's basic terms and categories have been well explained by Commons, Gane-McCalla, Barker & Li (2014) and do therefore not have to be outlined here (See Coombs, Dawes, and Tversky, 1970, Commons and Richards, 1984a, 1984b; Commons and Rodriguez, 1990, 1993; and Lindsay & Norman, 1977).

"So *tasks* are understood as the activity of organizing information. Each task's difficulty has an order of hierarchical complexity required to complete it correctly" (Commons, 2008). Quantal in nature, tasks are either performed correctly or not completed at all. There is no intermediate state or intermediate performance (even though there are transition steps).

"This objective, quantal feature of tasks and stages means that discrete ordinal scores can be assigned to them" (Commons, 2008). Hence, as a quantitative behavioral developmental theory,

the Model of Hierarchical Complexity includes a validated scoring system (see Dawson-Tunik, 2006, for hierarchical complexity validation studies).

Since hierarchical complexity applies to any event or occasion in which information is organized, the kinds of entities organizing information that can be studied by the MHC include humans and their biological systems as well as their social organizations, non-human organisms, and machines (for example computers). "The reason why it applies so broadly is that within its mathematical method of measuring tasks, scoring does not depend upon the content of the information (e.g., what is done, said, written, or analyzed) but upon how the information is organized". This makes the MHC fairly universally applicable cross-culturally and even cross-species, in any context. "Moreover, because the MHC's stages are conceptualized in terms of the hierarchical complexity of tasks rather than in terms of mental representations (as in Piaget's stages), it eliminates dependence on mentalistic, cultural, or other contextual explanations. Thus, the highest stage represents successful performances on the most hierarchically complex tasks rather than moral or intellectual maturity". However, as far as moral development is concerned, validation studies have shown a very strong relation between traditional scoring according to Kohlberg's Moral Judgment Interview (MJI) and the MHC's Hierarchical Complexity Scoring System (HCSS). Actually, the HCSS

is even more exact than the MJI, because it provides absolute scaling due to its content-independence (Commons, Galaz-Fontes & Morse, 2006).

The formal orders of the model are presented in Table 1. In order to analyze corruption and attitudes towards corruption with the MHC, tasks have to be defined which identify the concrete behavioral demands on each stage of performance. This will be done in the following sections.

**» APPLYING THE MHC TO CORRUPTION – THEORETICAL AND ANALYTICAL GAINS**

The following section will demonstrate how corruption can be understood in a more complex and thus, more adequate way by using the MHC. This will be done with regard to two aspects: First, in view of corrupt behavior itself, i.e. by looking at how behavior changes as action logics increase in complexity. Second, the model’s descriptions of action logics also show how our understanding, perception and evaluation of corruption change as reasoning becomes more complex. Table 3 below illustrates how behaviors and their understanding increase in complexity on the different levels identified by the MHC. For the purpose of the present article, we have limited this discussion to the most common behaviors, i.e. those between primary operations (stage #8) and meta-systematic operations (stage #13), since behaviors less complex than #8 and more complex than #13 are not yet relevant for analyzing corruption as of today. In order to explain the theory contained in table 3, we will first focus on corruption as a behavioral phenomenon, while the second subsection deals with our perception of corruption on different levels of complexity. However, both aspects are closely linked due to the logical relations of reasoning and action.

**The complexity of corruption as measured by the MHC – theoretical and analytical gains**

Before turning to the MHC, we wish to briefly recall Kohlberg’s model in order to make clear to what extent the MHC is more differentiated and goes beyond Kohlberg’s stage descriptions. The relation between stage definitions in Kohlberg and the MHC is demonstrated in table 2.

In his neo-Piagetian theory of political development, Stephen Chilton (1988) has illustrated the dilemma of corrupt behavior as seen by Kohlberg’s theory with an example. In the example, a bureaucrat’s professional ethics (loyalty to the rule of law, stage #4 morality) is challenged by various arguments, each of them coming from a different complexity level of morality: stage #1 threats, stage #2 bribes or stage #3 appeals to friendship. An effective bureaucracy as an abstract system of rules needs moral justification, i.e. bureaucrats functioning at Kohlberg’s stage #4, typically arguing that observing rules and laws is an end in itself, because otherwise, social order and/or the functioning of the respective organization would break down. The following example presents the dilemma of a bureaucrat functioning on the basis of a stage # 3 morality, and whose professional ethics is challenged on that same level:

**Table 2.** Correspondence of Stage Models (Kohlberg – MHC)

MHC stages		Kohlberg stages of moral development		
15	Cross-paradigmatic	(7)	(hypothetical)	
14	Paradigmatic	6	Universal ethical principles	Post-conventional morality
13	Meta-systematic	5	Social contract (may conflict with moral principles)	
12	Systematic	4	Authority and social-order maintaining, law and order	Conventional morality
11	Formal	3/4		
10	Abstract	3	Social expectations, interpersonal accord and conformity, good boy/girl	
9	Concrete	2/3		Pre-conventional morality
8	Primary	2	Exchange, self-interest, what’s in it for me?	
7	Pre-operational	1/2		
6	Sentential	1	Obedience and punishment	
5	Nominal	0/1		
4	Sensory-motor	0		
3	Circular sensory-motor	-1/0		n.a
2	Sensory or motor	-1		
1	Automatic	-1/-2		
0	Calculatory	-		

*Note.* This table has been adapted from Commons & Sonnert 1994 and Tuladhar and Commons, 2014

*Client:* Why don’t you just set aside those requirements? After all, I am a friend and neighbour of yours!

*Bureaucrat:* If I did that I would disappoint my boss, who is counting on me to follow the rules.

*Client:* How can you put your boss ahead of me, your old friend and neighbour?

*Bureaucrat:* (no answer).

A bureaucrat making moral judgments on Kohlberg’s stage # 4 would immediately recognize the inadequacy of this demand. Our stage #3 bureaucrat, however, “might dimly feel that the client’s appeals in terms of friendship or personal ties are wrong, but stage 3 counter arguments give no clear support” (Chilton, 1988), since his personal ethics of service are equally stemming from a stage #3 personal loyalty, instead of from the authority of the rules or laws themselves. This also explains why functionaries often show little or no remorse with regard to their corrupt actions. Rationalization as explored by some of the authors reviewed by Fein & Weibler (2014), is a strategy which only appears on stages higher than Kohlberg’s #3, because it requires an awareness of discrepancies between one’s actions and the moral codes defined by the respective organization or context (see the paragraph on formal stage reasoning below). The absence of both remorse and rationalization in many contexts (indications of stage 8 or 9 action logics, see below) therefore explains why corruption is such a widespread and often unquestioned phenomenon there.

Moreover, Chilton’s example not only illustrates a typical discrepancy between the institutional logic of a bureaucracy and the actual action logic of the empirical actor, showing that “unless the

**Table 3.** Stages of complexity of corruption and corruption communication

Order of Stage	General behavioral competences	Forms of corruption (if applying)	Examples (past and present)	Attitudes towards corruption	Reaction to corruption/ anti-corruption action
14	Paradigmatic Coordinates, integrates and synthesizes meta-systems, builds paradigms, requires high degree of decenteration	???	Non currently known	Understands reciprocal nature of social relations in a broad sense (general good) → no simple answers	Makes shareholders take their positions themselves → organizes inter-shareholder dialogue (including real or perceived enemies) in order to co-construct acceptable shared sets of precepts and to make corrupt practices unnecessary
13	Meta-systematic Compares and coordinates various systems, builds meta-systems out of disparate systems, formulates high level principles, as well as meta-theories (theories about theories)	Advanced capacities of perspective taking → corruption more and more unlikely; highly developed actors using their enlarged systemic view to take advantage of less developed actors.	As complexity increases, corruption turns more and more corporate or political, not individual anymore; price fixing, gaming the market on a higher level of complexity; i.e., one can <i>really</i> game the system in an enduring institutionalized way	Ability to take all stakeholders' positions → understands inherent logics and structural supports and constraints of corrupt behaviors and systems, as well as shortcomings of other systems to deal with it	recognize the range of structural changes necessary, far more than agreeing on precepts → works on flexible, stage adequate solutions to meet demands and enhance complexity development of actors on each stage. Solutions are beyond "one size fits all"
12	Systematic Multiple relations among formal variables, considers relationships in contexts (→ building systems); more complex interpersonal relations, more abstract concepts (e.g. transparency, accountability, social justice, ethics etc.)	Understands complex systems in different domains (such as legal, market, financial system) → invent systems to skirt market and transparency rules	Speculation, monopolistic practices, price fixing, gaming the market Western businesses in developing countries, giving bribes because "this is the way the system works"	Corruption seen as counterproductive, dysfunctional and undermining economic systems, raising costs and prices, spirit > letter of law own values, experiences tend to be generalized and projected onto others	→ anti-corruption legislation, advanced transparency and accounting practices Effective competitive systems reduce corruption
11	Formal Coordinates two abstract variables, calculates the influence of one variable on another one, solves problems with one unknown using algebra, 1-dimensional linear logic (if-then) and empiricism	Coordinates own interests and the risks of getting caught → ego-driven rational choice behavior serving own interests and trying "to get the most out of the system", strategic behavior to prevent getting caught.	Bureaucracies, including parastatals and other non-state actors, with or without free competition "beating the system" in the Soviet Union and other socialist systems	Sees how to advance own interests without breaking the rules and regulations, recognizes threats to one's interests posed by other actors → corrupt behavior becomes a problem → bad consciousness if caught, strategies of rationalization	→ legal criminalization, procedures to prevent/penalize corruption are created, but not implemented very effectively because systemic causation is not understood. In some cases little or no persecution, because this is, after all, how "business gets done" and how influence is deployed
10	Abstract Builds abstract concepts and variables out of finite classes of concrete phenomena, makes and quantifies propositions; logical quantification, categorical statements/stereotypes	Social norms (e.g. to be honest and give fair service) and roles (e.g. boss, leader, subordinate, officer, teacher) are understood, but contradictions between roles and norms go unnoticed. Bribes ARE social norms in most abstract stage contexts/societies	Developing countries, Tsarist Russia (19 <sup>th</sup> century)	Contradictions to norms are not considered as problematic if one is in the "out group", bribes are mostly not considered as "corrupt". → No relevant discourse about corruption, unless by external pressure	"Corruption" is not a legal category of illegitimate behavior yet → no anticorruption action.
9	Concrete Full complex arithmetic, coordinating two perspectives, follows complex social rules, forms cliques, plans reasonable deals, conceives history and geography	Perspectives of ego and other are coordinated → deals are made which benefit both sides. No consideration of other perspectives, needs or rules.	Italian Mafia, early 20 <sup>th</sup> century, other mafia-like structures	Deals are the normal way things get done. Power and money determine the outcome of deals. No abstract rules and evaluations.	Corruption might be seen as a deal gone bad
8	Primary Simple logical deduction and empirical rules involving time sequence, simple arithmetic, does series of tasks on its own	Behavior performs single tasks sequentially, without coordinating or reflecting them as interrelated or as objects, e.g. "I give you something", "you give me something", without logical connection between the two	(No difference between "corrupt" and other behavior other than obtained consequences of breaking specific rules)	One takes what one wants if one can get away with it	Complains to teacher, parents and other authorities about other people's bad behavior

institution's structure is preserved by people at the appropriate stage, the institution will regress to less developed forms" (Chilton, 1988). It also makes clear that it is precisely the transition from Kohlberg's stage #3 to stage #4 action logics which is crucial for overcoming and preventing corrupt behaviour in organizations. However, Kohlberg's model does not offer categories for describing and analyzing the transition between those stages in more detail. This is where the MHC can make valuable contributions. From the general matrix of behavioral complexity presented in table 1, we can now deduce tasks defining the complexity of concrete behavioral demands and competences on each stage of performance.

The following overview of stage descriptions and action logics, as illustrated in Table 3 shall make clear that what we call "corruption," i.e. the misuse of public office for private gain,

- » only comes into being as a social phenomenon after the abstract concepts of "public" and "private" have been formed (MHC stage 10), while the respective behaviors constitute the normal way of being and acting on MHC stages 9 and below;
- » is only considered problematic or socially harmful after contradictions between social norms and individual behavior can be coordinated and dealt with in a non-arbitrary way (MHC stage 11) and
- » that corruption can only be prevented or at least effectively reduced once efficient social systems (such as legal, financial, market systems etc.) are in place and functioning as the dominant social, political and economic structures, i.e. supported by a sufficiently large number of people (MHC 10). This is also where most discourse about corruption takes place.
- » Moreover, adequate and sustainable solutions of the problem of corruption are likely to be reached only on the basis of at least meta-systematic structures of reasoning and performance (MHC stage 13 and higher) which are able to understand the inherent logics of corrupt behaviors and to design stage-sensitive solutions beyond "one size fits all."

At this point, we have to stress that as a rule, organizations, like societies in general, "are comprised of individuals operating at multiple stages of development in various domains" (Ross & Commons, 2008). Thus, organizations, as well as "political cultures and social systems display concurrent operations of several different stages. There are many overlapping systems and relationships among different people and entities. That fact has understandably contributed to analytic and policy confusion" (Ross & Commons, 2008). At the same time, there are always modal stages, i.e. stages at which most individuals operate within organizations, societies and governments and which thereby characterize the stage at which the respective entities are likely to operate as a whole (Commons & Goodheart, 2007).

We will now explain the behaviors and their underlying action logics on each stage of complexity as contained in Table 3 in more detail and discuss their implications in view of corruption, as well as corruption control. The following stage descriptions are based on and in part quoted and/or adapted from Ross & Commons (2008).

*Concrete behavior—corruption in organizations "avant la lettre."* Concrete stage 9 reasoning "focuses on events, people, and places that are personally known" (Ross & Commons, 2008, p. 484). Individuals, societies and (members of) organizations functioning at this stage are preoccupied "by subsistence concerns and demonstrate short time horizons. Social behavior is [therefore] characterized by reciprocal exchanges involving concrete goods and services, and simple social rules. Dyadic relationships are prevalent (e.g., to plan deals, trade favors, and barter). Others' perspectives are considered only if those others affect oneself or one's close group or enable deals that both parties regard as fair" (Ross & Commons, 2008, p. 484). Since there are no abstract concepts such as public/private, a greater common good or rules about right or wrong yet, societies or organizations functioning at a (hypothetically) pure concrete stage do not have bureaucracies, administrative structures and civil services in a Weberian sense.

This means that individual actors reasoning at this stage cannot take the perspective of the organization as an abstract whole or consider its overall rules and codes of conduct as long as the latter are not identical with their own immediate needs and interests. Rather, their thinking and behavior is organized around we-groups, the members of which are personally close (like my family, my tribe, my clan, my friends etc.). Therefore, if individuals at the concrete stage hold "public" offices, they tend to treat them as personal property, or as a means to expand their personal property. In fact, this was the dominant attitude towards public offices in all pre-modern societies all over Europe (Schattenberg, 2008). It is therefore not surprising that this action logic can still be found in developing countries all over the world.

As to organizational logics on the concrete stage, Ross & Commons (2008, p. 484) state that "at some point, some approach to formal government is introduced" there. But its purpose or function is not to implement abstract principles or organizational goals, "but rather the power and wealth of its leaders, and only to some degree the protection of its subjects. At this stage, specific officials (e.g., a king, leader, warlord, president, or minister) essentially 'are' the government from the concrete stage perspective. This is because roles are not separated from the ones who fill the roles. They do not have to be, because leaders are personally known or known of, and followership is based on personal and economic ties, not roles. Without concepts of contracts or title to goods, government is not needed to regulate transactions; physical possession constitutes ownership and power. Despite possible appearances of a form of central government, rule is exercised in traditional ways: making deals and exerting raw power in the 'friend or foe' mode" where the outcome of deals is determined by power and money (Ross & Commons, 2008, pp. 484-5), as it is mostly the case, for example, in Mafia groups all over the globe.

While higher stage individuals, governments and international bodies commonly judge concrete stage societies' efforts to have and run organizations and governments as corrupt, from their own perspective deals, "bribes and 'under the table' reciprocal arrangements are the normal way to conduct affairs" (Ross & Commons, 2008, p. 485). Since neither roles nor abstract concepts such as "private/public", nor formal rules exist on this (hypothetical) stage of individual and organizational complexity development,

they cannot conflict with one another. Thus, the term “corruption” does not exist as an analytic or (dis-)qualifying concept. In our view, it is important to understand this, since in the theoretical perspective of complexity development, there is no point in trying to convince concrete stage individuals to conform to abstract rules or ethics codes whatsoever. Rather, strong personal power-based authority is the strategy that works best with them in order to eventually achieve norm conformism.

In Kohlberg’s model, the concrete behavioral logic corresponds to the transition between stages 2 and 3 of moral judgment. While stage 2 morality primarily asks “what’s in it for me”, and perceives others in relation to what they can contribute to the satisfaction of one’s own needs and interests, stage 3 morality is defined by conformism to reciprocal expectations and good interpersonal relations. A good example for a concrete stage culture is the “ethics of southern Italian mafia of the early 20<sup>th</sup> century as described by Pino Arlacchi (1989; see also Paul & Schwalb, 2011).

**Abstract stage behavior and corruption in organizations.** It is only with the movement to the abstract stage and the development of social norms that the use of force is seen as illegitimate and that practices such as bribes may be considered corrupt – if they go against the respective social norms in place, which, however, is not always the case. At this level of complexity, abstract thought develops as a new competence, forming “variables out of finite classes” of concrete phenomena, and making “quantifying abstract propositions” (Ross & Commons, 2008, p. 485), classifications and generalizations. Only on this basis can abstract ideas and concepts such as public/private, as well as social roles and rules be understood. “People performing at the abstract stage value social norms”. This is why they begin to form bureaucratic organizations. Very often, they are quite attached to religious values and ideas like personal honour. This means that they can now “negotiate by trading normative values (unlike Concrete stage 9’s dealing in tangible currencies from money to animals to people)” (Ross & Commons, 2008, p. 486).

However, those abstract roles, rules and values cannot yet be coordinated with one another in a non-arbitrary way. This is because in abstract thought as understood here, “individual rules can be conceived to accomplish a desired end, but the method to implement the rule cannot be conceived. (...) A rule can thus be explained and followed, yet contradictions with other rules or norms go unnoticed” (Ross & Commons, 2008, pp. 485-6). This may lead to dysfunctional behavior in the sense that different norms are played off against each other. “For example, a bureaucrat may be as faithful to the norm of charging bribes (because that is the way things get done), as to the rule to be honest and give constituents fair and equal service” (Ross & Commons, 2008, p. 486).

This is especially the case since abstract stage “loyalties are [often] unquestioned” and based on “group memberships which help people form their identity at this stage” (Ross & Commons, 2008, p. 485). While in contrast to concrete stage 9 we-groups, abstract stage 10 group associations begin to take the shape of membership in social relationships with others that are now possible also without physical contact to other members (for example in political parties, trade associations and unions, and religious organizations), a clear method or principle for deciding between

conflicting loyalties is still missing. Loyalties are rather based on groups’ or leaders’ belief systems or ideologies, often connected to dualistic assertions, prejudices, stereotypes about, and definitions of the “in-group” and the “out-group. Therefore, “strong, paternal-type leaders, often charismatic, tend to be preferred, on the assumption that they will take care of their children/followers and keep the group or society harmonious and fair”. In cases “when real differences cannot be solved any other way, abstract stage negotiations can also agree to live with them to preserve harmony” (Ross & Commons, 2008, p. 486). This is why abstract stage organizations and societies often appear to be inconsistent and/or chaotic to outsiders, especially to observers on higher stages of reasoning complexity.

This action logic probably describes most of the organizational practices in pre-modern and/or developing societies, both in European history and in the present, and has only gradually been combined with or replaced by more complex logics (Fein, 2012; Schattenberg, 2008; Fleck & Kuzmics, 1985). Moreover, it can be assumed to play a considerable role in organizations still today. In Kohlberg’s terms, abstract reasoning roughly corresponds to stage #3 conventional morality and is thus, as explained in the beginning of this section, not adequate in view of preventing corruption in organizations. For even though bribing starts at and is most typical of the concrete stage, it also exists at the abstract stage, where its power and influence depend upon the culture as to what is socially normative. In some cultures, bribes clearly *are* the social norm. (Note that even though the practice of bribing is lessening at higher levels of complexity, it does extend up even into the systematic stage. But in cultures in which bribes are not tolerated, then at the abstract stage, they are not tolerated by downward assimilation, i.e. because a sufficiently strong formal (stage 10) action logic and value system exist in the respective organization or social context which has enough authority to make sure that bribing is criminalized.

So in view of implementing ethics codes vis-à-vis stage 10 individuals inside organizations, it is crucial, first, to analyze where and to what extent abstract reasoning is present in the respective organization, and to what degree the actual norms of the abstract stage reasoners are either compatible with or contradict the desired codes of conduct. Second, it might be advisable to appeal to the abstract stage’s sense of loyalty by making clear that the desired code of conduct is an essential part of organizational identity and vital for its survival, well-being and inner harmony.

**Formal stage behavior and the criminalization of corruption in organizations.** The first action logic clearly discriminating and criminalizing corruption as an inefficient behavior is the formal stage #11 reasoning. It is characterized by the ability to coordinate two abstract variables in a non-arbitrary way and therefore, to see and to avoid contradictions between behavioral norms and rules, as well as between those rules and actual behavior. Formal stage reasoning is more complex than abstract reasoning, “because it involves solving problems by using logic, mathematics, and empirical investigation in order to find out what is true. What is considered true [here] is thus based on forming relations out of variables, where logic is linear and one-dimensional, because only one input variable can be considered at one time” (Ross

& Commons, 2008, p. 486). For example, people reasoning at this stage “prefer uncorrupt practice once they deduce that they can save money and have more predictability” this way (Ross & Commons, 2008, p. 494).

These new logical relations, along with enlarged capacities of social perspective-taking, help people to distinguish between social roles and the individuals who hold them, and to understand “logical cause-and-effect-based regulations and procedures”, as well as their benefits and consequences. “Roles and procedures thus come to be viewed as logical necessities for organizations and government to function well enough to succeed” (Ross & Commons, 2008, p. 494). People thus gradually learn to communicate through more impersonal contacts and to rely on formal institutions in their everyday affairs. In result, abstract stage corruption is reduced, because once formal regulations define power in legal terms, supported by systems of checks and balances, “the ability of individuals to exercise personal power over public resources declines”. Moreover, “a key government task in the change from abstract to formal stage is to legislate a social contract that takes over the functions of the previously ubiquitous informal systems” (Ross & Commons, 2008, p. 494).

In stage 11 organizations or societies, formal economics and laws are also advanced by the formal action logic’s “empirical interest in increasing productivity, training, and wealth distribution”. Moreover, it discovers “that the existence and enforcement of criminal and civil law promotes trade and investment. This connection is made easily at this stage because each is a simple empirical relationship between two abstract variables” (Ross & Commons, 2008, p. 486). Members of formal stage societies therefore begin to explicitly demand the rule of law to prevent (...) corruption” and to increase efficiency of public institutions). Ross & Commons (2008) add that “depending on the culture, it takes time and courage for citizens to publicly voice such demands. Such behavior may risk one’s status in the patronage systems people have long relied on” (p. 494). So if the formal action logic represents the dominant culture of a society or inside an organization, it has the capability to bring about and maintain efficient impersonal structures, systems and bureaucracies for regulating social and organizational life. “Extensive written laws and regulations” tend to be “implemented in ‘letter of the law’ fashion” (Ross & Commons, 2008, p. 486). To the extent that rules and laws become “effective in moderating organizational crime”, including corruption, competition turns more “civil”, and it is more and more “the contingencies of the marketplace which control social relations and status”. Therefore, formal stage reasoning is crucial for establishing and maintaining public infrastructures. For the same reason, “this stage is the objective of many efforts to introduce market economy and democracy.

However, when formal stage regulatory ideas are exported to non-Western countries”, to contexts that have not known them before or that have not developed them by themselves, “there may be too few persons performing at the formal stage to understand how procedures are supposed to work or the underlying logic (e.g., separation of legal powers or administrative duties)” (Ross & Commons, 2008, p. 486). If the target context is mistaken for a formal stage context, “the new forms of government or business procedure may just provide new facades to which conventional

behaviors of patronage adapt and persist, usually even more effectively because access to new resources is available. Ross & Commons, 2008 argue: “For example, the formal concept of employees on payroll is used to pass resources to clients, often as ‘ghost employees’ who do not work for the employer. (...) Bureaucracies become engorged through such arrangements. Because in-group ties are stronger than other ties in abstract settings where formal stage structures are imported, many people are often less successful at distinguishing an employment role from a political party role, for example, party loyalty trumps formal role responsibility” (p. 486). In socialist systems, we witnessed a curious mixture of formal bureaucratic systems and partly less-than-formal cultures and action logics which is why those systems often did not function effectively (see Merl, 2012, 2010, 2008; Voslensky 1984).

On the other hand, there is also a formal stage corruption proper, for “people who use formal reasoning are good at using rules to find or create loopholes to implement their own strategies” (Ross & Commons, 2008, p. 486). In this case, one’s own interests are coordinated with another variable such as the risk of getting caught. At the same time, formal reasoners are not very good at anticipating the consequences of their actions, because a more complex systemic perspective is not yet developed. Due to missing systematic coordination of variables, formal stage actors “may be clever at ‘cooking the books’ to hide bribes, yet not foresee how they will either still get caught” (Ross & Commons, 2008, p. 486), or how their behavior (further) undermines the working of the system as a whole. In both cases, rationalizations are a typical formal stage strategy to justify one’s behavior or to “buy oneself out of trouble.”

In this sense, the formal action logic is an important step towards Kohlberg’s stage 4 morality, but not yet this morality itself, because it does not yet see and take into account the more general systemic consequences of one’s own behavior as the former would do in a rather strict manner.

**Systematic stage behavior, corruption and corruption control in organizations.** The competence to simultaneously coordinate multiple variables only appears on stage 12, which is characterized by systemic reasoning and acting in more complex contexts, social relations and time horizons. Actions at the systematic stage 12 (and within action logic research, we also consider thinking as an action) are defined by the “coordination of more than one variable as input and the consideration of simple relationships in context. These coordinations and considerations construct multivariate systems, matrices, and webs of causation, resulting in more complex societies” (Ross & Commons, 2008, p. 487), as well as more complex theories about these societies.

“In systematic stage societies, systems of formal relations are coordinated among the legal, societal, corporate, economic, scientific and national spheres. Because at this stage, organizational systems are complex enough to address and achieve multiple goals simultaneously, society is predominately lawful, and advanced accounting practices make business relatively transparent. Markets, stock exchanges, and the like produce complex impersonal relationships among people, and more intricate laws and regulations stabilize markets and attempt to prevent monopolies” (Ross & Commons, 2008, p. 487). So at this stage, corruption is

generally further reduced, yet still existent, and becomes more sophisticated. Moreover, the fact that people reasoning at the systematic stage expand their perspective on themselves and the society still further has several consequences in view of corruption and corruption control.

Since “people can now consider a multivariate combination of such factors as the rule of law, fear of exposure, preservation of image, methods of reporting, and market pressure” (Ross & Commons, 2008, p. 487), behaviour becomes more conscious and more differentiated, taking into account broader social horizons, interests and constraints. This leads, for example, to the introduction of professional norms which define being a professional as having a role independent of personal affiliations and conflicts of interest. Also, “more highly abstract concepts [are formed], such as transparency, accountability, social justice, and sustainability”. On this basis, systematic reasoning “can conceive systems of transparency and control to reduce corrupt practices” (Ross & Commons, 2008, p. 487). In fact, the systematic perspective is the first to recognize corruption as a systemic problem that has to be fought, because it is understood as being counter-productive and dysfunctional for the working of the system as a whole. This is why only stage 12 systematic reasoning fully corresponds to the definition of Kohlberg’s stage 4 morality, which we identified earlier as a necessary condition for overcoming and preventing corruption in organizations. As Kohlberg’s stage 4 morality, systematic stage anti-corruption discourses would argue that corruption is detrimental to the functioning of organizational systems as well as to the broader social systems in which the former are embedded, and that this is why it has to be addressed in a principal and consequent way. As a result of dysfunctional elements being identified, institutions start to function better once the systematic action logic has become the dominant culture. Also, substantial criteria gain importance over formal ones. For example, “applications of laws are now more ‘in the spirit of’ than ‘the letter of’ the law” and procedures, and governmental processes become more “orderly and fair” (Ross & Commons, 2008, p. 487). Democracy is therefore valued not only for its formal and efficient rules as on the previous level of reasoning, but for just outcomes.

However, the systematic stage’s enlarged perspective also entails two kinds of ambivalent consequences. First, systemic reasoning can not only promote corruption control, but also “conceive systems to skirt efforts to enforce transparency” (Ross & Commons, 2008, p. 487). Frequent types of stage 12 corruption are speculation, monopolistic practices, price fixing, and gaming the market, as well as, on the international level, multinational corporations using bribes to “get business done” in non-Western countries, often rationalizing that “this is the way the system works”, as was the case with Walmart in Mexico, for example. This is why “this stage can neither succeed in entirely escaping transparency measures nor eliminate efforts to sabotage attempts to institutionalize transparent practices and reduce corruption” (Ross & Commons, 2008, p. 487).

Second, due to missing meta-systematic competences to coordinate several systems, i.e. to take a self-critical, distant look on their own system of values and institutions, “legislators, judges, and administrators” at the systematic stage tend to project their own ideals of organization and their experiences of government

onto others and other contexts “in a logical, but non-empirical or scientific manner” (Ross & Commons, 2008, p. 487). In a related way, systematic reasoners also tend to “assume a common value system” across societies “or, where values differ, that their own, i.e. the value system” of the respective researcher,” international body, legislator, or government official is ‘right’”, i.e. most progressive, “and that of the others is ‘wrong’” (Ross & Commons, 2008, p. 487). This tendency often motivates the export of systematic stage (sometimes declared “Western”) systems to non-Western or earlier-stage settings, “where they fail... because they are systematic stage” ideals, reasonings and action logics which “are imposed on and expected from earlier-stage settings to no avail” (Ross & Commons, 2008, p. 487).

A more adequate and thus more efficient strategy would thus be to take stage differences between reasoning and action logics into account both in theoretical and in corruption control practice. This, however, requires an even more complex and decentered perspective, which is only possible at the meta-systematic stage.

**Meta-systematic stage reasoning and behavior and its handling of corruption in organizations.** Following the MHC’s conceptual logic, the meta-systematic stage 13 is defined by actions that “compare systems”, amongst them systematic stage perspectives, and “create supersystems out of systems of relationships” (Ross & Commons, 2008, p. 487). This means that meta-systematic reasoning not only sees the limitations of the systematic action logic, but it also recognizes and considers the other action logics as *systems* of thought and action in their own right, following their own internal logics and dynamics and each having its own merits and shortcomings. Because it is even more self-reflexive and more detached, meta-systematic reasoning no longer sees its own value system or reasoning habits as a universally desirable (or realistic) “fit” for each context and every organization. Instead, it is able to take the perspectives of the action logics empirically functioning in each context and, accordingly, to handle the internal logics and dynamics of various types of corrupt behavior appropriately. In result, meta-systematic reasoning is more likely to generate solutions that are more sustainable, because they can flexibly match the specific problems on each stage and in each context.

In this respect, a central challenge consists in meeting the demands and motivational structures of the different logics of reasoning and action. This means, for example that concrete reasoners can most likely be convinced by power, and abstract ones by authority, whereas formal action logics have to be motivated by reasonable self-interest, and systematic reasoners by appealing to their sense of professionalism and social responsibility. Only on the basis of taking into account this complexity dimension of reasoning and behavior (action logics), we claim, can organizational ethics programs and codes of conduct be implemented successfully and sustainably. And only on these grounds can further complexity – and thus, ethical development of the respective actors eventually be enhanced.

Even though similar political and organizational meta-systems are empirically rare and, where they exist, still imperfect and fragmentary, they attempt to “incorporate the much higher amount of complexity involved in adequately qualifying any system of [thought, action and] duties, (...) beyond ‘one size fits

all”. Moreover, only the meta-systematic perspective proposed here fully recognizes that the latter kind of efforts is “limited by assumptions that do not stand up to the order of complexity which actually must be addressed, and are therefore condemned to fail” (Ross & Commons, 2008, p. 488).

Hence, our analysis suggests that meta-systematic stage perspectives are a necessary and extremely efficient tool for more adequately understanding both empirical phenomena of corruption in organizations and the way theorists and practitioners have tried to cope with those phenomena. Not only can governments and organizations do a more complex job based on a meta-systematic action logic, able to handle behavioral, psychological legal and institutional systems simultaneously. Meta-systematic theory building as proposed here also provides insights into the inherent patterns of structural complexity of current discursive and scientific constructions of corruption. It can therefore help to re-evaluate and more adequately assess the plurality of attitudes towards corruption and to overcome disciplinary reductionisms. This aspect shall be discussed in some more detail in the following subsection.

#### Analyzing the complexity of attitudes towards corruption: public and scientific discourses on corruption as measured by the MHC – theoretical and analytic gains.

The previous section has made clear that “corrupt” phenomena only appear at a particular level of complexity of reasoning and behavior, that they change in character while action logics become more complex and more differentiated, and that they increasingly become objects of reflection in result of this process of complexity development. The following section summarizes the essence of the stage descriptions given in the previous sub-section, placing a special focus on the complexity of *perceptions of* and *perspectives on* corruption on different stages. On this basis, we then discuss how some of the contributions to scientific discourse on corruption reviewed elsewhere (Fein & Weibler, this issue) can be re-evaluated by using the MHC. However, we wish to stress that the examples from literature on corruption cited in the following section are merely intended to illustrate the respective structures of perceiving and theorizing about corruption presented here. Note that we do not claim to thereby give comprehensive evaluations of the publications cited with regard to their overall structural complexity. The latter would demand a much more systematic analysis of the respective contributions which is beyond the scope and the purpose of this article.

In view of analyzing the complexity of attitudes towards corruption, a general hypothesis is that perceptions and understandings of corruption become more comprehensive, more encompassing (more “holistic”), and thus more adequate as perspectives become wider, i.e. as more aspects of the empirical phenomena are included, and as social actors’ perspectives are explored in more depth within a synergetic research design. Besides the number and kind of factors and variables considered, further criteria for measuring the complexity of discourse are its degrees of self-reflexivity (called “subject-object balance” by Robert Kegan, 1982) and contextualization, the nature of anthropological statements or assumptions that are, and the relation between analysis and evaluation of corrupt phenomena. So let us briefly go through the stages of corruption

as defined by the MHC in table 3 again and look at how each of them meets and treats those criteria.

Concrete stage 9 and earlier perspectives clearly have no discourse on corruption. This is because what higher stage reasoning perceives and considers as “corrupt” is the normal way to get things done in those action logics. Since the dominant perspective is egocentric here, there is no self-reflexivity on concrete or earlier stages, nor is logical scientific reasoning possible. Also, normative evaluations do not occur, since abstract norms and concepts (such as right/wrong, corrupt/moral) have not been formed on these stages.

Abstract stage 10 reasoning can conceive abstract norms and rules, such as fairness and honesty. It can thus also distinguish “corrupt” from “moral” or “correct” behavior. But since those concepts cannot yet be coordinated in a non-arbitrary way, contradictions to and between those norms and concepts tend to go unnoticed. In result, neither those contradictions nor the respective behaviors are perceived as problematic. In most abstract contexts, bribes are therefore not considered as “corrupt”. Reflexivity is still limited on this stage and does not include rational/logical scientific reasoning. As a consequence, there is no relevant discourse about corruption on this stage, unless by external pressure (downward assimilation). Instead, abstract stage reasoning, on the one hand, tends to make categorical assertions in the sense of stereotypes without empirical basis or logical/theoretical reflection (e.g. “all evil people go to hell”). On the other hand, it clearly treats other problems as more important than corruption, such as personal honor and being on the right side of the bar. For evidence from Russia see Fein (2012).

Formal stage 11 reasoning therefore has to be considered as a major breakthrough in our collective way of sense-making and understanding the world. Based on what Piaget identified as formal operational thought, this structure of reasoning is able to coordinate two abstract variables in a non-arbitrary way. This means that formal reasoning is capable of and interested in determining the relations between variables in a scientific, i.e. logical, reliable, and often empirical way. This competence is the very basis of and an essential component and condition of scientific practice until today.

With regard to the perception and analysis of corruption, this has two implications. First, its capacity to see and coordinate the differences between norms, between behavior and norms, as well as between personal interests and public and/or organizational goals makes it the first reasoning structure able to clearly define and identify particular phenomena as “corrupt” both on a theoretical and practical level. Hence, corrupt behavior becomes conceived of as a problem here. As a consequence of the formal competence to make clear evaluations, corrupt behavior tends to be legally criminalized as conflicting with and as inefficient compared to formal rules and procedures. Moreover, such rules and procedures are introduced to regulate how violations shall be dealt with. However, in societies that acquire formal level thinking for the first time, legal criminalization mostly remains formal (i.e. letter-of-the-law) and is not yet accompanied by systematic practices to ensure its practical implementation (spirit-of-the-law).

At the same time, corresponding discourses do arise both on the social/public/political level and in the scientific domain,

discussing, not only how corrupt behavior can be punished, but also how it can be explained. In this respect, formal reasoning may identify specific factors as particularly relevant, for example factors situated in the personality of the respective perpetrator. It will then discuss how those factors can be manipulated in order to fight corruption. In fact, this is what a large portion of research on corruption continues to do: It tries to explain corrupt behavior in relation to or as a result of the interaction of specific, often quantifiable variables, for example the amount of wages paid, the size of bribes, the degree of a person's love of money, self-interest or behavioral control (see the examples cited in section above).

However, since formal reasoning can consider only one input variable at one time, its logic is linear and one-dimensional. This means that explanations on this level of complexity only consider causal relations between two variables at a time. As a result, they construct logical, yet rather unidirectional cause-and-effect relations which, from more complex levels of reasoning, appear to be reductionist, because a systematic perspective of the institutional contexts of corruption is still missing. This is also why formal legal criminalization is often not accompanied by systematic persecution and effective anti-corruption action on a societal level due to the lack of well-functioning state bodies able to implement the law. The Soviet Union and other developing countries are classic examples of existing formal anti-corruption legislation lacking systematic implementation.

From these perspectives, critiques like those voiced above may be raised, namely that corruption is studied by constructing plain variables out of complex phenomena that not enough aspects of the problem are considered, and that linear assumptions of causality between those variables are made. Another critique might be that discourse on corruption on a (hypothetically pure) formal stage does not explore the deeper, more complex dimensions of behavior and social relations and rather uses some form of rational choice theory to make simplistic assumptions about both of them, which are not empirically supported. Similar practices have been identified in a considerable number of publications on corruption in organizations as discussed above and by Fein & Weibler (this issue). As reasoning becomes more complex, those shortcomings are increasingly reflected and can thus be gradually overcome.

Systematic stage 12 reasoning takes the perspective of the system which it is part of, i.e. an organization, institution or society as a whole. This means that it sees and discusses corruption by asking what role it plays in the functioning of the respective system or organization. From that perspective, corruption is easily recognized as counterproductive, dysfunctional and harmful to systems based on the rule of law such as market economies and liberal democracies, since it undermines their rules, exchange mechanisms and codes of conduct.

An interesting exception, or rather variation of this kind of systemic stage reasoning is the analysis of corruption in the Soviet Union as proposed by sociologists like Stefan Merl (2008, 2010, 2012) and Michail Vozlensky (1987). It reveals the relationship between societal and organizational cultures and individual behavior. In socialist systems too, corruption was generally an illegal, yet widespread practice. "Corrupt" behavior (at the time called "blat" in Russia & Ledeneva, 1998, 2006) was often legitimated by social

actors by arguing that there was no other way to get things done, since the formal institutions did not work properly in the sense that they were not able to guarantee functional distribution of goods and services and to provide economic welfare. While social actors from the Soviet context themselves tend to ex post legitimize their own behavior by typical formal stage rationalizations (e.g. "in my case, it was not *blat*, it was help/friendship"; "a favor is not illegal"; "between friends the requests can be unlimited. [...] If my best friend asked me something, I felt morally obliged and, in fact, preferred to compromise with my formal duties rather than break our relationship" etc., Ledeneva, 1998), researchers have argued that without corrupt or other illegal/"unethical" practices, the economy would not have worked at all. In other words, they declare those practices to have been functional elements of the socialist system in place. Of course, from a systematic perspective, the opposite (classic Kohlberg stage # 4) interpretation would equally be possible: If everyone had observed the rules, standards and political requirements (which in fact were indeed partly unrealistic), there would have been no problem, neither with corruption, nor with economic supply. Unfortunately, a more thorough empirical support of either position is impossible in this case.

However, in general, systematic stage discourse about corruption is connected with a clear negative evaluation. Research based on this reasoning logic therefore tries to combat corruption on a structural level, i.e. not only by punishing corrupt actors, but by putting into place complex systems of corruption control, for example through advancing sophisticated transparency rules and accounting practices. In other words, it tries to improve the (efficiency of the) system in any possible way by inventing new mechanisms of control and/or prevention or, inversely, by introducing incentives for ethical behavior. This is done on the basis of a more complex understanding of the interrelations between multiple variables determining individual behavior and the functioning of institutions.

Thus, behavior is now either regarded as *one* variable amongst others within a complex system of interrelations, or as a result of multivariate influences itself, and thus assumed to follow more complex logics. However, those logics are usually still studied on the basis of theoretical assumptions about behavior such as the ones made by rational choice or other behavioral theories, whereas the internal dimensions of behavior tend not to be explored empirically in a more systematic way, for example in view of uncovering its inherent dynamics. This is because, in contrast to meta-systematic stage 13 reasoning, systematic stage thinking does not recognize behavioral logics as systems, and because multiple systems (action logics) are not yet coordinated with one another in a non-arbitrary way.

In connection with this stage's systems view and its sensitivity for multivariate interrelations, the notion of context is newly acquired. Since this concept has become an important element of the currently dominant systematic stage scientific culture and discourse, it is no surprise that the importance of context is stressed in many of the publications reviewed here – even if they do not consequently practice contextualization themselves. Note that indeed, systematic stage reasoning is not able to contextualize *itself* and its own functioning due to missing meta-systematic

competences. This is why its evaluations are often framed in moral terms or as appeals to ethical principles such as fairness and social responsibility. In fact, since on this stage, the spirit of the law is more important than its letter, more attention is put on establishing cultures that support the principles that are now “generally accepted” as ethical. This is why ethics codes defining rules of conduct and organizational best practices are very attractive to this kind of reasoning as normative guidelines for regulating and evaluating the behavior of organizations and their members. And because systematic reasoning does not yet contextualize itself, it also tends to generalize its own insights, perceptions, values and experiences once they have been found to be scientifically true, economically successful or ethically most progressive in a process of either rational or moral discussion, or economic competition, and tends to project them onto other actors and contexts. Often enough, this includes developing strategies to export systematic stage values and institutions, amongst others its systems of corruption control, to other parts of the world.

As might already have become clear by now, most of the current public and scientific discourse on corruption in western societies is functioning on this level of reasoning. Implicitly or explicitly acting on the assumption that modern capitalist economic systems and democratic political and organizational cultures are the most progressive and sophisticated forms of organization and governance, the respective systems and their internal mechanisms are analyzed in view of their performance, merits and shortcomings in various domains, but they are not contextualized themselves. This is why, for example, the stage dependent character of their concepts and evaluations remains unquestioned, and the structural nature of different kinds of “corruption” unnoticed. So while stage 12 typically does see various forms of corruption or corruption control as distinct, it merely treats them as types rather than as independent systems of thinking and acting (action logics) of their own. An example for this is Donald Lange’s (2009) brilliant model identifying four types of corruption control, each “serving different functions” (autonomy reduction, reward and punishment, legal compliance and social conformity, and intrinsic motivation). While Lange does mention a connection with “individual differences [...] such as differences in the stage of cognitive moral development”, he does not systematically relate the workings of those types of corruption control (which exactly correspond to Kohlberg’s stages 1-4) with the respective action logics that either bring them into existence or make them functional and efficient in particular contexts or with particular people, i.e. people functioning according to the respective action logics. And even though he rightly recognizes that “any particular corruption control type entails implicit assumptions about human nature” (2009), he does not give the bigger picture according to which all of those types of behavior are part of the same (more complex understanding of) “human nature” which can – and at the same time has to develop those structures one after the other. Similar comments apply to Seraphim Voliotis’ study on the abuse of authority (2011), which offers an interesting typology of corrupt behaviors, yet again without integrating them into a coherent meta-system according to some overall, non-arbitrary principle.

The new, more complex kind of task that can be completed at the meta-systematic stage 13 is the capacity of building meta-systems out of systems, i.e. of coordinating different systems (among them scientific theories) with each other in a non-arbitrary way. In result, this order of reasoning is able to build meta-theories for organizing previously disparate theories in a way that makes visible the merits and shortcomings of each theory based on an evaluation of their respective structural complexity. In order to perform this task adequately, an even greater detachment and (self-) reflexivity is necessary. Moreover, this reasoning structure starts to practice second order contextualization both in view of analyzing “corrupt” (and other) behaviors and with regard to the ways those behaviors are dealt with by other logics of reasoning (theories about and attitudes towards corruption). In other words, meta-systematic reasoning contextualizes systematic stage reasoning itself. On these grounds, it recognizes how all theorizing and behavior is a function of its own internal structural complexity. It is thus decentered enough to take (and change between) different theoretical, as well as stakeholders’ positions, i.e. to see and appreciate all of them both from the inside (according to their own internal logics instead of evaluating them on the basis of some external set of values) and at the same time to analyze and interpret them from a detached structuralist view.

In this sense, the theory and arguments presented here are meta-systematic in that they propose a meta-theory integrating various theories in a non-arbitrary way. The Model of Hierarchical Complexity provides tools for assessing the structural complexity of reasoning and behavior. It thereby helps to identify the possibilities and the limits of different behavioral logics by exploring the structuring mechanisms and internal logics which at the same time motivate and constrain empirical behaviors. Assuming that all behavior is consistent from its own point of view, meta-systematic reasoning tries to detect the principles, criteria and cognitive frames within which the respective behaviors can be seen and understood as “normal”, logical and coherent. On this basis, the latter can thus be perceived as independent systems in their own right.

In view of dealing with corruption, meta-systematic understanding of the internal logics, supports and constraints of various forms of “corrupt” behaviors leads to a kind of societal macro-morality. This means, above all, a stage (or complexity) sensitive way of perceiving and reacting to them, thereby overcoming the structural shortcomings of other theoretical and practical systems trying to deal with those problems. Meta-systematic ethics or morality could thus be conceived of as a morality of adequacy, working on flexible, stage adequate solutions, in order to meet demands and enhance complexity development of actors, organizations and institutions on each stage. Hence, “societal macro-morality” also means that solutions generated on this stage of reasoning are beyond “one size fits all.”

At the same time, due to its advanced capacity of perspective taking, to compare and coordinate various systems, and its ability to contextualize its own perspective, meta-systematic reasoning is also aware of the fact, that there are even more complex ways of theorizing about and dealing with corruption ahead, which have not yet been developed on a cultural level to a more relevant extent (and which are therefore left out of the discussion here).

So if we try to give an overall evaluation of the publications on corruption reviewed here and in Fein & Weibler (2014) from a meta-systematic perspective (more thorough individual evaluations are beyond the scope of this article), we can conclude that most of them are based on structures of reasoning situated between formal and systematic logics, with a few exceptions reaching into meta-systematic thinking. As a matter of fact, we often find mixed forms. This might be due to multiple interrelations between the respective researchers' own habits of reasoning and influences of particular scientific or disciplinary cultures which authors are part of. It may also be due to different researchers/authors working together using different orders of complexity according to which they understand the subject in question, so that their collaborated paper is mixed with orders of complexity. This hypothesis and/or experience was proposed by Sara Ross (personal communication, 2012, June).

In conclusion, in order to make clear that meta-systematic or similarly complex research perspectives do exist, even though they are still rather rare exceptions and often somehow remain "captives" of earlier stage mainstream scientific cultures, let us briefly look at Ashforth et al.'s (2008) review of scientific organizational corruption discourse. Calling for "theory development" that integrates "micro, macro, wide, long and deep views of organizational corruption" in view of a "considerably more holistic understanding", Ashforth et al. recognize that corruption (even though they still call it a dynamic "disease") "evolves in complex ways" (2008), and through "interacting subsystems" with their own inherent rationalities and subtle complexities and dynamics that our current level of theorizing has not yet captured. They therefore deplore that this kind of "deep view on corruption" is the one that is "least developed". Moreover, their assertion that "We management scholars/teachers might reasonably be asked, 'Are you part of the problem or part of the solution?' Arguably, we're both" indicates a degree of self-reflexivity which is rarely found in other publications. However, this short selective quote does not claim to be a systematic evaluation of the stage of reasoning complexity of Ashforth et al.'s article as a whole.

An even clearer meta-systematic perspective on corruption is presented by Alina Mungiu-Pippidi (2006) in her analysis of post-communist Romania (2006), claiming that "corruption can only be understood in conjunction with the stage of development of a particular state or society". In view of each society, she claims, "we must ask: are we dealing with modern corruption where corruption is the exception to the norm of universalism? Or are we dealing with particularism and a culture of privilege, where corruption itself is the norm? Or, as is frequently the case in the postcolonial world where the modern state was defectively implanted on a traditional society, are we dealing with a combination of the two? If so, to what extent is its main task to promote patronage and cater to specific interest groups?" Mungiu-Pippidi thereby clearly distinguishes different systems and their respective internal logics. To sum up, she concludes that "corruption will persist as long as human nature does not change. (...) An anticorruption agency might work well in democratic Australia, with its tradition of an independent judiciary, but the same kind of institution would fail to indict or arrest anybody who is 'somebody' in the former Soviet Union."

## » DISCUSSION AND CONCLUSION

This paper was motivated by the desire to resolve a number of surprising, theoretically puzzling observations about present theorizing about corruption. More precisely, our primary theoretical motivation was to account for the plurality of strikingly different and sometimes even contradictory perspectives that important disciplines currently dealing with corruption within the social sciences take onto the phenomenon. We have asked how those differences and contradictions between and within disciplinary approaches can be explained and how they can eventually be bridged. While reviewing the literature, we also found substantially different understandings of corruption in different social and scientific cultures and contexts, as well as in different times, and asked how they can be explained and made sense of. Furthermore, we observed that mainstream western notions of corrupt and/or unethical behavior (which are usually taken for granted as "generally accepted" in large parts of the OB/BE/MS literature) are probably not representative in non-western context and are therefore not very helpful for dealing with corruption in many of those other contexts. In this regard, we asked to what extent those mainstream notions have to be contextualized – or at least to be made more explicit – in order to be able to make more generally valid claims about the phenomena in question. Finally, in view of the Model of Hierarchical Complexity as a new analytical tool presented here, we asked how it can help to solve the problems mentioned above, namely to integrate the perspectives, questions and findings from different disciplines and to thereby to provide a more complex and a more differentiated outlook on corruption/unethical behavior. In this regard, the MHC has in particular been compared to Kohlberg's classic model of the development of moral reasoning. So what are the main insights and contributions to be gained from this endeavor?

### Theoretical contributions and implications

Our main contribution is to re-interpret phenomena of corruption, as well as of public, political and scientific ways of dealing with corruption in different times and different cultural contexts on the basis of an integrative model for analyzing physical and discursive behavior in a concise and non-arbitrary way, which can thus be considered as a universally applicable meta-systematic tool for detecting the structural patterns of both discourse and behavior. This general contribution can be broken down to methodological, empirical, and theoretical benefits and achievements, each of them showing why this kind of approach is an important improvement as compared to less complex perspectives.

**Methodological relevance.** Coming from the field of structuralist adult development theory and research, the Model of Hierarchical Complexity is based on content-free, mathematical analytical categories and definitions, which makes applicable in different disciplines and thus enables it to render views and findings from different theoretical and disciplinary backgrounds comparable. Providing tools for analyzing the complexity of reasoning and behavior it does not produce the usual culturally biased outcomes and can thus introduce more analytical rigor into the study of corruption in organizations.

**Empirical relevance.** Furthermore, our contribution is important for empirical reasons. Abundant research has shown that the development of cognition and other aspects of the mind does not stop after adolescence. With regard to moral development for example, it has been shown that “most adults are at the conventional level” of moral reasoning, and that “fewer than 20% of American adults reach the principled level (...), where actions should be more consistent with moral thought” (Treviño et al. 2006). This has strong, yet still largely underestimated consequences not only for social, political and economic life in general, and for organizational behavior in particular, but also for analyzing all of them. This observation expands on Treviño et al.’s (2006) claim that cognitive developmental dimensions have “clear implications for behavioral ethics in organizations”. More precisely, recalling a statement by some of the leading adult development scholars cited earlier, organizations, as societies in general, “are comprised of individuals operating at multiple stages of development in various domains. Thus, political cultures and social systems display concurrent operations of several different stages. There are many overlapping systems and relationships among different people and entities” (Ross & Commons, 2008). At the same time, there are modal stages, i.e. stages at which most individuals operate within governments, societies, and organizations and which thereby characterize the stage at which the respective entities are likely to operate (Commons & Goodheart, 2007).

In other words, theories which don’t take into account those empirical facts, fail to grasp an important dimension of behavioral reality and thus remain undercomplex. While many of the dominant research traditions tend to leave this dimension out of systematic analysis, adult development perspectives render them analyzable, and even place them into the center of analytical attention, thus offering an alternative, more complex way to frame intercultural corruption research.

**Meta-systematic theory-integration.** In view of theory integration, the theoretical and analytical power of the meta-systematic perspective presented here is able to account for corrupt behavior in different times, for different types of corrupt behavior, and for the differences in the attitudes of historical and present actors, societies and scientific discourses towards corruption at the same time (see Fein & Weibler, 2014). First, it integrates historical findings according to which corruption is a product of modernization during which public and private spheres came to be differentiated, and only as a result of which distinguishing between practices of and debates about corruption began to make sense. In fact, empirical descriptions of and findings about historically more distant societies prove to be compatible with lower levels of complexity development in general, as well as in present societies. Second, our meta-theory integrates the sociological finding that to what extent corrupt behavior comes to be critically reflected, depends to a large extent on variables like education and socio-cultural development. Moreover, in contexts where rather low levels of development in adults prevail, we tend to find higher levels of corruption (e.g., in developing countries). Third, our model integrates anthropological findings observing that on the behavioral micro level, practices of reciprocity, often considered as corrupt by higher stage reasoning if used in public, remain important not

only on earlier levels of social development, but also in informal and private contexts in western societies. It thus makes clear that premature value judgments may prohibit an appropriate analysis of actual behavioral logics. Finally, our meta-theory is able to integrate questions and findings from many other disciplines in the fields studied in more detail here, namely Behavioral Ethics, Organizational Behavior and Management Studies.

As a result, the model proposed in this paper not only offers a better understanding of where ethical and unethical/corrupt behavior come from, addressing individual, organizational, and institutional influences on ethical behavior and, thereby, both micro, meso and macro levels of analysis. Because of its high degree of detachment and (self-) contextualization, it also offers a substantially new and more complex outlook on actor’s understandings of and attitudes towards corruption. By making clear why perceptions differ not only between cultures, but also inside western societies, as well as inside scientific communities, it can bridge differences, gaps and contradictions in the literature and thereby reconcile previously disparate perspectives. As a structuralist framework, the MHC goes considerably beyond Kohlberg’s model of moral development, for example by distinguishing more stages of complexity and by proposing even more objective criteria for their structuralist analysis. The approach proposed here can thus be situated in several academic literatures at the same time without being attached to any of them. It can therefore push research on behavioral ethics and on corruption in organizations into new paradigmatic insights and substantially advance the field in both theoretical and analytical respects.

### Practical implications

Finally, besides the theoretical contributions mentioned above, our approach has also considerable practical implications. Meta-systematic, i.e. stage sensitive perspectives are able to more objectively and thus more efficiently adjust practical anti-corruption programs and activities to the respective nature of the problem. In other words, they define incentives, constraints, regulations and the like in view of the particular clientele they wish to serve. So instead of producing “one size fits all” solutions, they will come up with more differentiated strategies, depending on the level of complexity of reasoning and action of the concrete type of corruption in place, and of that of the actors trying to deal with it. For example, transparency regimes and ethics codes might work in systematic stage contexts while they will completely fail in connection with lower than formal stage actors, no matter if inside or outside western contexts. Unless a sufficient number of people in the context in question function on the basis of formal action logics, legal and bureaucratic solutions alone will not eliminate problems of corruption, but have to be combined with more traditional forms of authority. Similarly, appeals to ethics, fairness and social responsibility will not convince actors with less complex than systematic reasoning, because considering broader social consequences of their actions are not part of their reasoning structure. In this respect, our model clearly points out limitations of mainstream western strategies of corruption control “at home”, but even more so in developing countries.

### Limitations of the model and of the present paper

Of course, like every theory, ours equally has shortcomings and limitations. The same is true for the present paper. First, with regard to the meta-systematic perspective itself, its complexity of theorizing and perspective taking implies that it is ridden with prerequisites. One has to acquire a minimum familiarity with adult development theory and measurement techniques in order to be able to work with the model successfully. Second, when using the MHC for analyzing complex social phenomena such as organizations, one has to take into account the mutual influences of several levels of complexity of reasoning and action within the specific setting. While it may often appear that stages are not “pure”, or difficult to identify empirically, task definitions have to be carefully defined and constructed for each new study. Furthermore, larger empirical studies based on the MHC are rather intricate and time-consuming, since to achieve high inter-rater reliability, raters have to be intensively trained in working with the model. However, this concern applies to any new, notably complex measurement method and must therefore not be stacked against it. Finally, depending on the context in which the MHC, or more generally, adult development theory, shall be used, it has to be taken into account that in some parts of the social sciences, it is not easily accepted to claim developmental differences between social actors or cultures – even though this

critique often seems to come from a spontaneous (and rather superficial) reflex rooted in specific scientific cultures, rather than from a thorough examination of the model itself. However, similar criticisms can probably be countered successfully based on results of the model’s application in a certain field. At the same time, while the MHC offers a way of better understanding differences in development, as well as positions criticizing them, the model itself is, of course, a theoretical lens which can also be contextualized, and might eventually be evaluated on the basis of either more complex perspectives or otherwise well founded arguments at some point.

If space permitted, it would have been desirable to give more detail on how to use the MHC in concrete research settings, to supply more examples for corrupt phenomena and situations as seen, scored and explained by the model in order to make the theoretical and analytical gains offered yet more convincing. Even though we did spell out some important practical implications of our approach and provided a number of empirical examples, a more comprehensive discussion of applying the MHC on different aspects of corruption research was beyond the limits of this paper. Despite these caveats, the present paper demonstrated important theoretical and, at the same time, meta-theoretical contributions to be gained by a more systematic use of adult development perspectives on corruption. ■

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