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Siegwart Lindenberg

The Dependence of Human Cognitive and Motivational Processes on Institutional Systems

Abstract: How do institutional systems affect behavior? I suggest that these systems do not simply affect behavior via incentives or habits, but have an important impact on the cognitive and motivational processes that are vital for social coordination and cooperation. More specifically, I argue that institutional systems affect overarching goals that “set the mind” and heavily influence what people pay attention to and what they ignore, what information they are sensitive to, what they like and dislike, expect from others, and call success or failure. I describe these links between institutional systems and overarching goals in some detail and argue that, without understanding these influences, analyses of institutions would be seriously incomplete.

1 Introduction

Institutions permeate social life: as Hodgson (2006:2) put it, they “are the kinds of structures that matter most in the social realm: they make up the stuff of social life.” This evaluation may be accurate, but, surprisingly, there is little attention to the question of just how institutions acquire such centrality. As an economist, Hodgson may be an exception in this regard because he does question how institutions work. His answers are interesting and relevant, but they still miss much of the dynamic influence of institutions on social life.

Institutions are sometimes taken to be regularities of behavior (Schotter 1981), and sometimes they are taken as equilibria (for examples of beliefs, see Aoki 2001). For the social sciences, however, it seems more useful to define institutions as systems of established and socially embedded rules (North 1990). Only this allows us to theorize the very conditions that are necessary to establish equilibria, especially those that are conducive to sustainable value creation (Hodgson 2015). Thus, in the following I stick with the definition of institutions as rules. Part of every institutional system are the rules and guidelines that govern the implementation and enforcement of other rules, but how do institutional systems do their work if they function well? The standard view is that institutions create selective incentives and disincentives and thereby regulate behavior: constraining behavior is generally seen as the most important influence of institutions (North 1990). Hodgson expands on this view by introducing the concept of habit (the propensity to behave in a particular way). Habits are dispositions that also affect beliefs, expectations, and preferences (Hodgson 2003). Habits brought

about by institutions both restrain and enable behavior, but this does not yet tell us how institutions work.

To be sure, habit formation (and the concomitant generation of expectations) is very important. However, by not considering other behavioral mechanisms, Hodgson is forced to overload “habit” with effects that are independent of habit formation. For example, he insists that habit formation (as a result of institutions) create typical emotions, aspirations, and even “normative authority”. According to Hodgson, therefore, conformity to rules is automatically created by sheer habit, which is in turn stabilized by emotions, aspirations, and a belief in the normative authority of institutions, all of which are also generated by habit.

Greif (2006) argues, I think correctly, that the workings of institutions need much knowledge of context and history in combination with micro-mechanisms about motivation to follow rules. Regarding the latter, he refers to suggestions by proponents of the New Institutional Sociology (DiMaggio and Powell 1991). This approach considers institutions as creating cognitive habits by processes such as categorization, typification, identities, scripts and schemas (Powell and Colyvas 2008). What is habitual is how situations and actors are defined, what warrants attention, what is appropriate to do. This is much more detailed than what Hodgson offered, and calls attention to important cognitive aspects that are possibly influenced by institutions. Under the influence of institutions, individuals make practical judgments in response to the ongoing demands of their lives. However, this sophisticated approach lacks several important ingredients. First, there is no explanation for how institutions create these cognitive habits. Secondly, there is no mention of a mechanism that tells us why there are situational differences in the influence of institutions. There is almost no agency left and little interaction between the macro influence and the actor.¹ What is missing are microfoundations for the workings of institutions that include both the macro influence and the considerable role of agency under the influence of institutional systems (Lindenberg 1998). This approach also misses attention to the variability in the kind of motivations that are fostered by institutional systems, and does not question whether or not mixed motivations are conducive to the workings of institutions. In the following, I will deal with an approach that pays more attention to the intricate ways in which institutional systems affect interrelated cognitive and motivational processes, and thereby behavior.

¹ This may explain the great success of a “counter movement” to the New Institutional Sociology called Institutional Work (Lawrence, Suddaby, and Leca 2011), which focuses almost exclusively on agency (see the response by Hwang and Colyvas 2011).

2 Institutions and goal-framing: the microfoundational basis

Even though habit formation is important for human behavior, for a microfoundational basis of how institutions work it is more important to consider that human behavior is goal-directed. Humans have integrated cognitive and motivational processes that pertain to having and pursuing goals. These processes involve highly developed ways of mentally representing objects, symbols, relations, and desired states together with a large working memory capacity. Representations (including the desired states) are not mentally present all the time but are differentially accessible. Importantly, they influence behavior only to the degree they are activated at a given moment (Förster, Liberman, and Higgins 2005). This creates a crucial link between cognitive/motivational processes and the environment: the degree of activation of cognitive representations depends on the social and institutional environment. Once activated, advanced goal-related capacities come into play to monitor the degree to which an activated goal has been realized; to detect errors; to react to this information in such a way that, if the goal is realized, one turns to another goal, or, if progress is not satisfying, one takes action for improvement; to respond emotionally to success and failure in goal-pursuit; to determine the direction of action (approach or avoidance); and to inhibit incompatible goals (Carver and Scheier 1998).

Goal-framing through overarching goals is crucial for institutional microfoundations (Lindenberg and Steg 2007; Lindenberg 2013). The influence of the environment on goal activation does not work piecemeal, goal by goal. Rather, what is first and foremost influenced by the environment is the *kind* of goal that is pursued, determining the “ball park” or playing field. There are overarching goals that, to the degree they are activated, set and capture the entire mind (“mindsets”) and determine what classes of concrete goals are being pursued at a given moment. Thus, overarching goals operate like goals but also represent the contextual guidance for the selection and execution of concrete lower-level goals. In this process, overarching goals also activate mental models about the specific patterns of action and interaction (Feldman and Rafaeli 2002; Moldoveanu and Baum 2011). Such mental models are cognitive habits (including scripts and schemas for particular situations and actors). But, first, they only influence behavior if activated, and, second, they are not completely mindless but rather accessible to individual agency (Aarts and Dijksterhuis 2000), such as perspective taking (Dionysiou and Tsoukas 2013). They are also open to adaptation when ill-defined situations challenge strong automaticity (Zajac et al. 2013). Overarching goals can be influenced by the environment to such a degree that an individual is a norm-guided person at one moment and a self-centered egoist at the next. In sum, to track the influence of institutions of cognitive and motivational processes, we must track their influence on overarching goals.

There are three major overarching goals (Lindenberg and Steg 2007). While all three goals are chronically activated to some degree, at any given moment one of the three is most strongly activated (i.e., is the most salient) and thus has the strongest impact on cognitive and motivational processes, such as what people pay attention to and what they ignore, what information they are sensitive to, what they like and dislike, expect from others, and call success or failure. If one of the three becomes more activated, the others become deactivated to some degree. Thus, the three are dynamically interrelated.

First, there is an overarching *hedonic* goal that is oriented towards improving (or maintaining) the way one feels at a given moment. Since deficits in the satisfaction of fundamental physical and social needs are linked to the way one feels, the hedonic goal is strongly linked to fundamental needs. For example, belonging is a strong social need (Baumeister and Leary 1995; Lindenberg 2013), and rejection will activate a strong hedonic goal oriented toward making one feel better. Because of this focus on feeling better, being rejected does not necessarily mean one would behave in a way that increases belonging. It may lead to venting one's frustration by social aggression, thereby even reducing the chance of being accepted (Twenge et al. 2001; Twenge, Catanese, and Baumeister 2002).

Second, there is an overarching *gain goal*. It is oriented towards guarding and improving one's resources (such as money in our society). In contrast to the hedonic goal, the gain goal is linked to forward-looking and deliberate decision-making. It is the basis for planning and investment behavior, but also for strategic behavior, including opportunistic behavior and what Williamson called self-interest seeking with *guile*, including the "calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse" (Williamson 1985:47). The stronger the gain goal relative to the other two overarching goals, the more likely it is that norms and rules are only seen as possible constraints or as opportunities to manipulate others.

Third, there is the overarching *normative* goal. It is oriented towards behaving appropriately, furthering collective goals, and following social norms. People are able to put themselves into the shoes of a collective, and when the normative goal is strongest, people act as members of that collective and are especially sensitive to what they think one ought to do with regard to its norms and with regard to furthering its goals (including common values such as safety). This feeling of oughtness contains at least three elements regarding particular social norms that are contained in the mental model: the subjective importance of the social norm; the tendency to react negatively to social norm violations by others; and a tendency to feel obliged to follow the social norm oneself. It is likely that a small stock of social norms is hardwired or linked to genetic predispositions in such a way that they are universally generated and learned (Lindenberg 2014). Jointly, they form a kernel of social norms that is essential for the production of collective goods, and that is in any case part of the mental models belonging to the normative goal. A link to these social norms may be important for new norms to become social norms. These norms are

to be cooperative in situations that require joint effort; to share joint outcomes with others; to help others in need; to make efforts to understand and be understood; to be trustworthy; and to be considerate (i.e., care for externalities of your behavior for others). The particular collective to whom these social norms apply may vary, as people may be members of different collectives (see Lindenberg 2014 for a more detailed description).

An important feature of salient overarching goals (mindsets) is that they are the basis for the generation of expectations about others; they will also be influenced by cues about the most salient overarching goal of others (goal-frame resonance). People will generate expectations about others on the basis of their own most salient overarching goal at a given moment by projecting their salient overarching goal on others (Critcher and Dunning 2009; Van Lange 1992). Thus, an influence on the salience of an individual's normative goal will also make this individual more likely to expect others to be normatively oriented and not strategic or hedonic. Cues about other people's salient overarching goal are likely to strengthen the same overarching goal in the perceiver, and cues about others' diverging mindsets can lower the salience of the one's own mindset (Lindenberg 2000a; Keizer, Steg, and Lindenberg 2008). In this regard, other people's hedonic mindset is a stronger influence than other people's normative mindset, with a gain mindset in between. For example, if you are in normative mindset but realize that your interaction partner is in a gain mindset, it is more likely that your gain mindset will become more salient than that your partner's mindset will change in a normative direction. The reason for this asymmetry is evolutionary: the *a priori* strength of the hedonic goal is highest because it focuses on fundamental needs; the *a priori* strength of the normative goal is lowest, because it focuses on secondary conditions (collective goods) for individual adaptive advantages. The gain goal, focusing on personal resources, is in between. These interpersonal influences of mindsets are important, for example, for the question whether or not institutional systems that are seen as emanating from (or being enforced by) hedonic or gain oriented authorities need more monitoring to achieve conformity to their rules than those seemingly emanating from normatively oriented authorities.

For the link with institutional systems, it is important to note that the salience (i.e., the degree of activation) of each of the three overarching goals can shift ("shifting salience effect"). At any given moment one of these three overarching goals is more salient than the other two, depending mainly on the external influence on the salience (see Figure 1). The main claim of this essay is that institutional systems are a major influence on the salience of the overarching goals. In the remainder of the essay, I will try to show how this works.

Fig. 1: Shifting salience effects: situational factors can make one overarching goal particularly salient (i.e. making it the goal-frame).

3 Institutional influence on the salience of overarching goals

Institutions do not work as collections of rules, but as more or less interconnected systems of rules, combining both formal rules and social norms (see also Hodges 2006). For example, family law is heavily embedded in what is generally accepted as appropriate behavior in family relationships. There are strong complementarities between different institutionalized rules and between such rules and social norms. Still, it is likely that these complementarities are clustered to some degree (such as police law, contract law, family law, etc.). I will not go into such differences in clusters, but will simply address institutional systems in general.

Institutional systems influence the overarching goals in important ways, thereby also influencing the cognitive and motivational processes as well as behavior. I will discuss four such influences: first, influences on the normative goal; second, influences on the gain goal; third, influences on the hedonic goal; and fourth, influence on the balance between overarching goals.

3.1 Influences on the normative goal

Institutional systems can be more or less legitimate. While legitimacy as used here refers first and foremost to institutional systems (such as “the rule of law”, Tyler 2006), single rules that are added to an institutional system can be more or less legitimate depending on the degree to which they meet the legitimacy criteria that apply to a system as a whole. The important point here is that legitimacy is the major link of institutional systems to the normative goal. In fact, *legitimacy shifts rules in the direction of social norms, so that they are covered by the normative goal as if they were social norms*. This

implies that when certain rules of the institutional system are activated in a particular situation, they are experienced as being related to the goals of the collective and as something one ought to follow. Illegitimate rules are experienced as constraints that one might circumvent, if possible. This is probably the most important link of institutional systems to cognitive and motivational processes, although there are also other important links to be considered, as I will discuss below.

Before I go into detail about what it means for rules to be processed as social norms, I will briefly deal with processes that create legitimacy. As Weber (1978) showed long ago, the basis of legitimacy may differ for different kinds of societies. In our Western society, procedural and value aspects are of prime importance. Procedural aspects strongly influence whether or not a new rule is potentially legitimate. For example, for a new law to be legitimate, it must have come about in a certain way and have met with the approval of certain decision-making bodies. For an informal rule, consent of a majority may be required.

Importantly, the legitimacy of institutional systems and separate additions to them also depend on their presumed link to values (Tankebe 2013). This is a clear instance of the complementarity of formal and informal institutions. Institutional systems of any kind are thus more legitimate if they are seen as protecting common values. For example, traffic police authority is more legitimate if the laws enforced by the police are seen as protecting the safety of the participants in traffic and if the rules are applied fairly (see Mazerolle et al. 2013). Sanctions linked to deviation from legitimate rules are themselves legitimate to the degree that they are seen as protecting common values. By contrast, sanctions linked to deviance from illegitimate rules are viewed as constraints to be circumvented if possible.

The link of institutions to values is a functional link (with institutional systems seen as protecting common values), even though there may be no concrete evidence for this link. By contrast, concrete evidence of the effectiveness or ineffectiveness of a particular rule may affect its legitimacy. For example, a rule that a car needs to turn on headlights during the day to reduce accidents may turn out to be ineffective, in which case its enforcement (and possible sanctions) is seen as illegitimate. There is, however, a signaling effect that brings the interpersonal influence of perceived mindsets into play (Lindenberg 2000b). If the perceived effectiveness is low due to real or presumed selective or unfair enforcement, the link to the protection of common values is broken and the legitimacy of the entire institutional system is likely to be diminished. The selective or unfair enforcement is a cue for a hedonic or gain mindset of those in authority. The same is likely to happen if new rules are legitimized by appeal to common values but are clearly seen as means to seize power or to extract extra resources from the citizens. In both cases, the authorities are then seen as not being in a normative mindset, which increases the salience of the hedonic or the gain mindset in the populace. In that case, people might take the law into their own hands (vigilantism: see Nivette 2016). In sum, the legitimacy of an institutional system depends on procedural aspects and on its link to common values (also in its enforcement). Legitimacy,

in turn, creates the major link of an institutional system to the normative goal, with an important impact on cognitive and motivational processes, to which I turn next.

3.1.1 The cognitive and motivational consequences of legitimate institutional systems

To repeat: my answer to the question of what makes legitimacy work is that it makes rules function like social norms that are covered by the normative goal. Legitimate rules are seen as the means of the collective to reach common goals. The situationally relevant rules are likely to be activated as part of the mental models along with the normative goal. This effect on the salience of the normative goal and the concomitant mental models creates several important cognitive and motivational processes. First, it makes compliance to rules (and supporting compliance to rules by others) mainly a matter of a sense of obligation rather than of fear of sanctions (gain) or because it feels good (hedonic) (see also Yang, Van de Vliert, and Shi 2009). Clearly, gain and hedonic aspects may support the feeling of obligation, but they do so from the background. This support includes reputation effects. A good reputation feels good and is a resource. Given that the gain and hedonic goals are also chronically activated to some degree (even when the normative goal is salient), reputation mechanisms (such as gossip) in peer networks form an important support for the normative goal (Wu, Balsliet, and Van Lange 2016). It is important to realize that negative gossip only works to affect reputation if there are normative standards activated in the population against which one can judge what people have done wrong. Explanations that make use of reputation effects should thus also pay attention to the role of the normative goal for producing these effects.

Probably the most important factor for the salience of the normative mindset is social influence (by peers and authorities) in the sense of direct support for the normative mindset, such as showing respect for social norms and legitimate rules (Keizer, Lindenberg, and Steg 2013). With this support, following rules on the basis of obligation does not depend much on a high degree of monitoring by others, and this low need for constant monitoring is one of the main pillars of an institutional system.

Second, to the degree that the normative goal is salient, the gain and hedonic goals are pushed into the cognitive background. This means that strategic cost and benefit considerations are pushed into the background as well. Following rules often involves a personal sacrifice, a cost in terms of money (gain) or effort (hedonic), or a foregone advantage (gain) or foregone good feeling (hedonic). For example, paying taxes, waiting at a traffic light, or abstaining from hitting somebody who just insulted you – they all ask some kind of sacrifice. If one is unobserved, the net sacrifice is even larger because there is no possible sanction. Because personal sacrifices belong to either the gain or the hedonic goals, they will be more faintly perceived when these two overarching goals are pushed into the background (see also Lindenberg 1998).

Third, as already mentioned, an overarching goal creates expectations about the behavior of others that are basically projections of one's own salient mindset. Conversely, other people's mindsets affect one's own. These contagions create *multiplier effects* of institutional systems on overarching goals. Expecting others to be in a normative mindset and showing these expectations strengthens the others' normative mindset unless their most salient mindset is gain or hedonic. This subtle mutual strengthening of normative mindsets in day-to-day interaction is a major vehicle for legitimate institutional systems to create and maintain social order. Conversely, the same processes with the gain or hedonic goals may stabilize so-called descriptive norms (such as littering if you see others do it), but they will lower conformity to legitimate rules and social norms in the absence of close monitoring, raising enforcement costs considerably.

A practical example of these mechanisms is relational signaling in organizations. When the leadership signals a normative mindset, the followers are likely to be more committed to the collective goals of the organization (Mühlau and Lindenberg 2003; Six and Sorge 2008; Wittek, van Duijn, and Snijders 2003). When the leadership signals a gain or hedonic mindset, goal alignment must give way to interest alignment through positive and negative incentives coupled with a high degree of monitoring. Because close monitoring in complex organizations (as well as in complex societies) of all activities that are relevant for the institutional system is highly problematic, interest alignment as instrument of reaching compliance with institutionalized rules is highly problematic as well (Etienne 2011; Lindenberg 2013a). Thus, institutional systems have important multiplier effects that run via the effects of institutional systems on mindsets and via the contagion effects of mindsets.

Fourth, an important side-effect of projection and signaling processes is the fact that people with a salient normative goal are more likely to give a benign interpretation to the behavior of others. Thus, a person with a normative goal mindset is more likely to overlook the nonconformity of others to a social norm or a legitimate rule or interpret it as an accidental occurrence. This "smoothing" of social rough spots and mishaps prevents many potentially harmful escalations in social interactions (Hegtvedt, Clay-Warner, and Johnson 2003). Think, for example, of the considerable irritations and conflicts that can develop between neighbors when smoothing does not happen (Paquin and Gambrill 1994).

Fifth, a strong normative goal increases people's ability to self-regulate. Self-regulation prominently includes the ability to deal with temptations in terms of hedonic acts or goods (such as giving in to aggressive impulses) or in terms of resources (such as giving in to cheating on a tax return). With a strong normative goal both hedonic and gain goals are pushed into the background, and this allows people to withstand temptation better. They are thus better self-managers when their normative goal is strong (Lindenberg 2013b). In short, by affecting the strength of the normative goal, institutional systems also affect people's self-regulatory ability. This is yet another multiplier effect of institutional systems.

3.2 Influences on the gain goal

Institutional systems create predictability if they work in such a way that people follow the rules. This result may or may not be achieved on the basis of legitimacy. A police state may create predictability without legitimacy. For the present context, the important point is that institutional systems increase individual farsightedness (considering an action's future consequences) via the creation of predictability. Thus, rather than simply being a human trait, as is generally assumed in microeconomics, farsightedness is largely the result of institutional systems. For example, making people hedonic has been shown to reduce farsightedness (Van den Bergh, Dewitte, and Warlop 2008).

Importantly, when linked to institutions that encourage individual initiative, farsightedness allows a salient gain goal. By being focused on increasing one's resources, a gain goal is linked to deliberation, planning, and investment behavior. The importance of predictability *cum* individual initiative for economic behavior has already been stressed by Max Weber (1961). Economic activity may thrive temporarily by institutional systems that create farsightedness, but restricting individual initiative solely to the elite creates a hedonic rather than gain mindset in the general population (with fear as the main motivation for conformance). Acemoglu and Robinson (2012) described such institutional systems as “extracting” and unable to realize sustainable value creation.

A salient gain goal aids self-regulation in the sense that it helps maintain planning and deliberation against the short-term orientation associated with a hedonic goal. The self-regulation that is fostered by a salient gain goal is more limited than the self-regulation fostered by the normative goal. When in a gain mindset, self-regulation does not protect normative standards. For example, when one is in a gain mindset and tempted to cheat for personal gain, feelings of obligations to social norms are less likely to kick in and down-regulate the temptation, because the normative goal is pushed into the background.

3.3 Influences on the hedonic goal

Institutional systems also have an important influence on the salience of the hedonic goal. Remember that the hedonic goal is focused on feeling better and maintaining a good feeling. Even though people cannot simply choose an overarching goal, they can influence its salience. People can influence the salience of the hedonic goal in many ways. For example, they can control the activities they engage in (some activities will activate the hedonic goal more than others), what they consume (alcohol or not; fat or not), what they read (bland versus enticing), who they interact with (fun or serious), or what they talk about with others (emotion-laden or not). They can also influence emotions felt and expressed by what they allow themselves to think (Gross 2015).

Even though feeling seems to be the most subjective experience, there is considerable institutional influence on what feeling is appropriate to a given situation. Importantly, institutions influence both the appropriateness of focusing on the way one feels in a given situation, and the appropriateness of a particular feeling (emotion) in that situation. For example, in the courtroom, the judge is supposed to be impassionate and not to give way to feelings (Maroney 2011). At a funeral, it is appropriate to indulge in emotion, and the appropriate emotion is sadness. Work and home are also settings that differ regarding the salience of the hedonic goal. At work, a low salience is generally expected, while at home, a high salience is seen as appropriate (Lively and Weed 2014). Such “feeling rules” (Hochschild 1979) that form part of an institutional system do not directly create emotions, but they influence how people work on their emotions in order to align felt emotions with the feeling rule in a given situation. Of course, institutional systems are not the only influence, but they are an important one.

A possibly source of strain on interpersonal relationships comes from disproportional reactions to transgressions. The punishment must fit the transgression. In law delivery, the principle of proportionality plays as important a role (for example Harbo 2015) as it does in informal interactions (for example Lindenberg 1994). Even though it is not always quite clear exactly what kind of reaction is proportional to the severity of a transgression, the institutionalized expectation that reaction to a transgression should be proportional to the severity of the transgression is an important contributor to avoiding the salience of the hedonic goal with the danger of escalation and other negative consequences for the sustainability of social relationships.

Institutional systems also affect the salience of the hedonic goal in another related way. An important function of institutional systems is the regulation of externalities, especially negative externalities. This regulation also entails an important buffer against the destructive consequences of a salient hedonic goal. If my neighbor plays trumpet all night, I will get very angry and the relationship with him is likely to deteriorate. Regulating negative externalities can prevent salient socially negative hedonic states of anger, frustration, exasperation, hate, or ego defensiveness and general negativity (Lindenberg 1994). A benign feature of institutional systems is the multiplier effect: by affecting overarching goals, institutional systems also affect the social quality of human relationships. This is as true for the hedonic goals as it is for the normative goal. By regulating negative externalities, institutional systems will reduce stress produced by negative hedonic states. Less stress means less negativity, which in turn means less (unproductive) deterioration in human relationships (see Neff and Karney 2004).

Proportionality and externality norms have the function to prevent conflicts (and negative hedonic consequences) from occurring. But if conflicts ensue, most societies have institutional systems for resolving them in such a way that the hedonic goal does not become negatively salient. For example, organizations have various institutional arrangements for conflict resolution and arbitration (Morrill and Rudes 2010). Couples,

groups and communities often also have such arrangements (Rothman 1997) as part of the institutional systems in which they are embedded.

3.4 The influence on the balance between overarching goals

Institutional systems also affect the balance between overarching goals in the populace. A salient hedonic goal does not aid self-regulation, but by containing feeling rules (to the degree it influences the normative goal), an institutional system can create situational shifts in the salience of both gain and hedonic goals. The institutional system can create or deny “space” for the gain and the hedonic goals, thereby influencing whether an individual will engage in self-regulation and what kind of self-regulation it will be.

For modern economies, probably the most important influence of institutional systems on the balance between overarching goals comes from institutional systems that reduce the dependence of citizens on particular informal groups (Lindenberg 2015). Important examples are systems of welfare institutions, such as institutions regulating pensions, health, unemployment benefits, housing, etc. By reducing the dependence of individuals on their informal groups for support in case of natural disasters, mishaps, ill health, old age, etc., such institutional systems change norms of solidarity from “strong” to “weak” with considerable consequences for the functioning of society. Strong solidarity refers to social norms that may ask a high personal sacrifice for the ingroup, with equality as the distributional norm. It also goes with closed group boundaries and a clear differentiation from outgroups. In such groups (such as some cooperatives or religious sects), social support is high. When this high level of support from the ingroup is no longer needed due to welfare institutional systems, solidarity will weaken in the sense that the sacrifice that may legitimately be asked of a member is small, that the distributional norm is equity, and that group boundaries are also weak. Weak solidarity is also extended in some way to outgroups, thereby allowing relatively easy interaction with members of other groups.

Regarding economic activities that involve trading and/or joint production (with possibly unequal investments), however, weak solidarity is crucial as trading or cooperation must cross group boundaries. This is nevertheless only one condition for flourishing economic activity. The gain goal must also be involved. When institutional systems do not only reduce the dependence of people in ingroups, but also foster the salience of both the normative goal and the gain goals (inhibiting the hedonic goal for entrepreneurial activities), we get a special dynamic relationship between the normative and the gain goal in which the two goals easily displace each other as the most salient overarching goal. When people are in a gain goal, pursuing an increase in their personal resources, the normative goal is in the background. They may be tempted to break the rules and transgress social norms to get ahead in terms of resources. As a conflict of gain-related activities with legitimate rules and norms emerges, the norma-

tive goal in the background becomes more salient, lowering the salience of the gain goal. Conversely, as the sacrifices (in terms of resources) one must make for catering to group goals and following rules and norms increases, the salience of the gain goal in the background increases, lowering the salience of the normative goal. This special dynamic relationship may seem to be mainly a matter of informal rules (Ellickson 1998). However, as I have argued throughout this essay, all this takes place in the shadow of institutional systems, which affect the overarching goals in specific ways.

For any advanced economy, fostering the hedonic goal for the consumer is important. However, I have argued that, for conformity to rules and norms, it is equally important that the hedonic goal does not become predominant. A possible way to contain the strength of the hedonic goal, even though it is strongly supported by institutional systems of the market, is to balance the hedonic goal with the normative goal (in a similar way to the balancing of the gain goal with the normative goal). Institutional systems may greatly contribute to such a balance, for example through organized sports (Scanlan and Lewthwaite 1986). Rule-governed hobby sport has a strong relation to the hedonic goal (catering to virtually all physical and social fundamental needs: see Pelletier et al. 1995; Vallerand, Deci, and Ryan 1987), but also to the normative goal (fair play, discipline, team spirit etc., Elias 1986). As a spin-off, a multiplier effect of organized sport is that it also encourages a balance between hedonic and normative goals with regard to body care. Many forms of exercises can create hedonic “highs” (endorphin reactions), such as through jogging or aerobic exercises (Raichlen et al. 2012). In addition, there are hedonic reactions to an increase in physical fitness and competence (Vallerand and Reid 1984). There are also clear links between sports and exercise and the normative goal, such as the discipline necessary to achieve the hedonic “warm glow” effects of proving one’s self-discipline, and the factual increase in executive functioning through exercise (Guiney and Machado 2013; Buckely et al. 2014).

Clearly, institutional systems may differ widely regarding their ability to bring about a balance between the overarching goals. Based on the arguments above, one might expect this balancing ability of institutional systems to be ultimately the best predictor of the sustainability of value creation in a society.

In sum, balancing overarching goals is highly important in complex societies. Weak solidarity, however – the basis for balancing – comes at a price. The creation of weak solidarity by institutional systems is a potential source of precariousness for legitimacy. The legitimacy of rules derives to an important degree from the protection of values, but when institutional system span heterogeneous groups (as they do in cases of weak solidarity), it is likely that the values of subgroups will clash, thereby endangering the legitimacy of rules that may seem to protect the values of specific groups but not of others (Haidt 2012). For this very reason, two processes are very likely to develop wherever weak solidarity is supported by institutions. First, there will be a special focus on values that possibly unite the various subgroups (such as “democracy”, “freedom”, “equal rights for all”). Importantly, these values provide the basis

of legitimacy for the institutional systems that support weak solidarity. The support is thus circular, from institutions to values and from values to institutions. Second, there will be provisions for ongoing public debate about contested values (such as “Christian values”, “biospheric values”, “family values”) (Lindenberg 2009; Lindenberg and Steg 2013), including political contests concerning values. This makes the legitimacy of rules in societies with weak solidarity a moving target, a shelter that is constantly under construction.

4 Discussion

Institutions have considerable effects on cognitive and motivational processes. However, this influence does not solely exert itself through habits, as often claimed in the literature. In this essay, I have argued that we need a microfoundational theory for institutional systems that can specify the mechanism by which these institutional systems affect cognitive and motivational processes, and with what consequences. I used goal-framing theory (Lindenberg and Steg 2007) for this purpose and discussed the links between institutional systems and three overarching goals: normative, gain, and hedonic goals. An overarching goal determines the playing field for action, such as what people pay attention to and what they ignore, what information they are sensitive to, what they like and dislike, expect from others, and call success or failure.

As Schotter (1981:2) observed, “Those societies that create the proper set of social institutions survive and flourish; those that do not, falter.” The argument in this essay is that the well-functioning of institutional systems crucially depends on how they influence the three overarching goals. Institutional systems affect the influence of each of these goals on behavior by enhancing or reducing its salience. Of prime importance for the functioning of an institutional system is the influence on the normative goal, which, when salient, will orient people to the collective and to a feeling of obligation to follow social norms. Institutional systems can, to the degree they are deemed legitimate, cause institutional rules to be cognitively processed as social norms. Some argue that pure learning effects (“internalization”) of norms and legitimate rules create low-cost conformity to institutions (Cooter 2000). However, as argued in this essay, even internalized norms and legitimate rules must be activated to influence behavior. Institutional systems that fail in this activation (and keep doing so) will not function well.

The important role of overarching goals also has direct consequences for how we should conduct research on the functioning of institutions. All three overarching goals are influential at any given time (multiple motives), with one of them being most salient. They are likely to influence the verbal assessment of legitimacy in studies that track the influence of institutions on deviant behavior (in survey research) in a way that can be very misleading. For example, for many, it feels good to see oneself as a

moral, law-abiding person. Thus, when the hedonic goal is salient, being asked about legitimacy and one's own feeling of obligation to obey the law, the answer is likely to be that one feels obliged to obey, irrespective of the strength of the normative goal. If the gain goal is salient, it is likely that one considers it prudent to say that one feels obliged to follow the law. Conversely, if one has a history of deviant behavior, it feels good to blame the system and be cynical about law and law enforcement (Nivette et al. 2014). Attitudinal research of the influence of people's subjective feeling of legitimacy on deviant behavior thus yields rather modest effects (Eisner and Nivette 2013), possibly leading to a gross underestimation of the importance of legitimacy. In short, attitudinal introspection is not the ideal way to explore the influence of overarching goals on conformity to rules and norms. Rather, what is needed on the "independent" side is research on individuals' exposure to factors that influence the relative salience of overarching goals, such as the fostering of the balance of overarching goals by institutional systems; the (in)effectiveness of institutional systems (Roosma, Orschot, and Gelissen 2014); institutional support for self-regulation; and events that directly increase or reduce legitimacy (such as disrespect by others for rules and norms, experience of unfairness), etc.

Against the folklore permeating much of microeconomics that people are always oriented towards gain, we argue that a gain goal is only salient across members of a society if the institutional systems foster both predictability and individual initiative. If the institutional systems fail to do so, they are not functioning well. The same can be said of the influence of institutional systems on the hedonic goal (oriented towards feeling better and short-term effects). Well-functioning institutional systems regulate the salience of the hedonic goal by affecting the expectations in which it is, or is not, appropriate to focus on the way one feels. In well-functioning institutional systems, the appropriateness/inappropriateness of a salient hedonic goal optimizes positive multiplier effects and the balance between overarching goals.

Thanks to their impact on overarching goals, institutional systems can have important multiplier effects. Influencing the normative goal can create normative stability in social interaction because people signal their normative goal to others and expect others to have a similar mindset. Others' normative goals thus become more salient, and harmful negative escalations become less likely. By influencing overarching goals, institutional systems also influence self-regulatory capacities, which, in turn, affect virtually all interactions in a positive way. Related to this is a multiplier effect in the relational sphere. By affecting the balance between the hedonic and the other goals, institutional systems also influence stress, stress reduction, and negativity in interactions, and thereby have a huge impact on the quality of relationships.

For the modern economies, probably the most important influence of institutional systems on cognitive and motivational processes is their impact on the balance between overarching goals. This includes the fact that rules governing the implementation and enforcement of rules also belong to the institutional system. One way to illustrate this is to take up the question posed by Acemoglu and Robinson (2012) about

virtuous circles: what do the institutional systems look like that support sustainable value creation? In the economic literature, secure property rights have often been singled out as institutions that increase both predictability and individual initiative in economic behavior. For example, as O'Driscoll and Hoskins (2003) put it, "The difference between prosperity and poverty is property. Nations prosper when private property rights are well defined and enforced." There is also good evidence that secure property rights are associated with economic performance (Clague et al. 1996; Knack and Keefer 1995). But, from the discussion on legitimacy and the gain goal, it should be clear that this kind of statement leaves some of the most important drivers undiscussed. Acemoglu and Robinson (2012) add explicitly that inclusive political institutions, free media, and the rule of law are required for virtuous circles, but (interestingly) they do not go much into their cognitive and motivational preconditions. For the prominence of the gain goal, institutional systems must combine predictability with initiative and the flexibility required for adaptation. For the ability to engage in sustained trade relationship, contractual discipline, and joint production, a salient normative goal is also important (Birkinshaw, Foss, and Lindenberg 2014; Lindenberg 1992; Lindenberg and Foss 2011). Well-defined property rights and strict enforcement may reduce predictability when flexibility is needed. Room for interpretation (using intelligent effort) case by case is also required. Nee and Oppen (2009) provided evidence that a Weberian bureaucracy (expert and impartial) is one of the main drivers of economic performance, even in developed countries. Institutional systems affect the workings of bureaucracy, and, in turn, bureaucratic decisions are part of the implementation of the rules of institutional systems. Translated into the language of this chapter, what Nee and Oppen (2009) found is that a bureaucracy in which the civil servants are in a salient normative goal (with mental models that contain relevant knowledge of the areas in which they make decisions) is highly relevant for economic performance, if these bureaucrats also get the leeway to use intelligent effort.

For a well-functioning institutional system, however, all actors in the economy – not just bureaucrats – should act in such a way that they foster sustainable value creation. Institutions must systematically invite intelligent effort by all in such a way that it does not lead to strategic exploitation of flexibility. This has much to do with balancing the overarching goals. In his Nobel Prize lecture, North (1993) observed that adaptive efficiency (and not allocative efficiency) is related to economic growth. Singer (2003) argues that in modern economies, property rights should be established with "reason": that is, with regard to the technical, normative, and relational ambiguities that surround complex goods and ideas (see Lee 2002). This also speaks to the question of whether law should be codified in terms of clear rules or in terms of standards (rules that are highly abstract). For example, a rule may specify exactly what a driver should do in a given situation, whereas a standard might specify more generally that the driver has to use "reasonable care". Rules can be clear but may also have to change frequently due to changes in technology or other circumstances, whereas standards can be interpreted more flexibly and are more stable over time (Fon and

Parisi 2007). This distinction is echoed for social norms. As norms become more abstract because they must cover various situations and subgroups of people (such as “do not harm others”), much more intelligent effort is needed to apply them. What will not harm somebody of group A in situation X, may harm somebody of group B in situation X (Lindenberg 2008). Areas that change rapidly or cover a variety of circumstances should be governed by institutional systems in which standards play an important role (Singer 2003; Lee 2002). However, it is not just a matter of adding flexibility through case-by-case interpretations. More importantly, institutional systems that make greater use of standards also require institutional provisions for balancing the salience of overarching goals. Standards explicitly invite intelligent effort, but if they allow arbitrary interpretations, they only invite more strategic behavior and increase transaction costs. Strategic use of standards is curtailed by the special dynamic interdependence of the normative and the gain goals that keep each other in check. Glaeser et al. (2004) showed that political institutions as normally “objectively” assessed do not correlate with constraints on governments regarding expropriation (property rights regimes). What does correlate with economic performance is *subjective* assessments of government effectiveness (law and order, quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies). In addition, Knack and Keefer (1997) showed that people’s beliefs about their freedom to do business, but also about how smoothly one can transact that business, whether one can trust others, and whether people keep to social norms, are of prime importance. All these things refer to the balance of overarching goals brought about by institutional systems. An institutional system may do well or fail in bringing this balance about. A relevant question then for future research is: what specific institutional systems have what kind of specific impact on overarching goals? An institutional analysis that leaves such questions unasked or unanswered is seriously incomplete.

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