THE SOCIAL DYNAMICS OF JUSTICE: HOW EX-ANTE AND EX-POST JUSTICE INTERPLAY WITH FORMAL AND INFORMAL ELEMENTS OF MANAGEMENT CONTROL SYSTEMS

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Abstract

Management control systems (MCSs) are used by organizations to try to make sure that their goals are accomplished. MCSs are used to set goals and objectives, to measure accomplishments and to reward or punish people according to results. In this chapter, we argue that the social dynamics associated with MCSs vary according to whether or not justice is embedded in the way the systems are designed and used. We build on the model proposed by Cugueró-Escofet and Rosanas (2013), which shows that both formal and informal justice help to fuel the social dynamics of the design and use of MCSs in order to strive for better alignment between individuals and organizations. Afterward, we propose two contributions made by this model. The first one involves showing that separating ex-post and ex-ante justice, and separating ex-ante justice into formal and informal justice, can add to our current understanding of the social dynamics of justice. The second involves looking into the possible effects that different states of interest alignment can have in terms of creating short-term and long-term fairness. We close by showing the possible conclusions that can be derived from our analysis, which are important in terms of research and to the practice of organizational justice. We include possible proposals for future empirical validation of the model and also possible cautions when using ex-post fairness perceptions as a tool to look into the ex-ante formal and informal justice of MCSs.

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Introduction

Management control systems (MCSs) are used to help with the achievement of organizational objectives. MCSs are implemented using formal and informal controls (Anthony and Govindarajan, 2003, p. 98) that promote and reward people or subunits according to certain criteria in order to achieve the greatest possible level of goal congruence (i.e., when people pursue personal goals that conduce to organizational goals). MCSs have evolved from typically formalized systems (Chenhall, 2003; Davila, Foster and Li, 2009) to more complex systems with many indicators, called the Balanced Scorecard (Kaplan and Norton, 1992, 1993), which have helped to formalize company strategies into MCSs (Epstein and Manzoni, 1997; Kaplan, 1996), and cope with uncertain environments (Chapman, 1998).

MCSs create “dysfunctionalities,” which are unintended consequences that occur once an MCS designed for a specific purpose has been implemented. The most-studied dysfunctionalities are “short-term orientation” and “budgetary slack” (Merchant, 1985; Van der Stede, 2000). Later studies have focused on possible MCS designs that can partially avoid these types of dysfunctional behavior. However, dysfunctional behaviors can occur to avoid the unfairness of an MCS or they can create unfairness, and this aspect has only been partially considered in the literature, even if it seems clear that when dysfunctional behavior occurs, fairness towards people is always an issue that needs to be discussed (Cropanzano, 2001; Folger and Cropanzano, 1998). Many human problems linked to justice and fairness have an origin in the way the incentive systems are designed, and in how they are implemented and used (Argyris, 1953; Ashton, 1976; Burrell and Morgan, 1979; Hopper and Powell, 1985).

Cugueró-Escofet and Rosanas (2013) argue that formal and informal justice need to be present in MCS design and use to promote the social dynamics necessary to align peoples’ goals with organizational goals. The authors present a model in which combinations of formal and informal justice in an MCS generate four different states of goal congruence; the maximum congruence is achieved when there is formal justice in the MCS design and informal justice in the use of the MCS. The model clearly separates formal and informal justice in MCSs and helps to understand the role of both types of justice. This model concentrates on the explanation of ex-ante justice, and it can be seen as a starting point for separating justice that is proactive.
(design and use of MCSs) from justice that is considered more reactive (looking into recipients' reactions). But the model does not include ex-post justice explicitly, because the focus has been on the effects of ex-ante justice on creating goal congruence. As we will see next, this model is useful insofar as it extends our current understanding of ex-ante justice, and it can contribute to the existing models that have already been developed in the area, such as the ones presented in Blader and Tyler’s work on the four components of fair procedure (Blader and Tyler, 2003), and Greenberg’s concepts of the structural and social side of justice (Greenberg, 1993). However, it lacks an explicit exploration of the effects of goal congruence on fairness consequences in the long run and the short run, a contribution that we will make in this chapter.

In order to better understand the concept of ex-post justice, we use literature on organizational justice as a foundation because it focuses on reactions to decisions regarding distribution, processes, information and the personal treatment people receive from their managers. In general, four types of justice have been found by looking into the perceptions of justice from the recipients’ point of view: distributive justice, procedural justice, informational justice and interpersonal justice. In general, all of these justice types are ex-post perceptions, labeled ex-post justice in this chapter. We think that it is appropriate to take into account the discussion of ex-post justice, and clearly separate it from the ex-ante justice discussed before. We also think that formal and informal ex-ante justice can also help to classify people’s ultimate perceptions of justice.

We think that organizational justice literature can benefit in several ways from the use of the model proposed by Cugueró-Escofet and Rosanas (2013), and from the extension we propose in this chapter. The first way is by consolidating the distinction between formal and informal justice that some organizational justice researchers have debated before (Blader and Tyler, 2003; Greenberg, 1993); this can also serve our purposes of extending the model in order to consider fairness as an ex-post consequence of goal congruence. The second benefit concerns goal congruence or interest alignment as a consequence of ex-ante justice. We think that this variable helps with understanding the dynamics of formal and informal justice and how they are connected to the fairness experienced by recipients. The third benefit is the use of this framework to clearly distinguish two different types of justice: what we have labeled ex-ante justice (formal and informal justice in MCSs), and ex-post justice (fairness consequences from the point of view of the recipients). In that respect, we help separate two different elements: proactive justice and the justice received. The final benefit involves ex-post justice; the use of the extended model permits us to consider time effects, because it explains how justice can be a short-term and a long-term effect of goal congruence, depending on the level achieved.

First, we will discuss the importance of MCSs in our understanding of the social dynamics of justice, using goal congruence as a basic associated concept. Second we will delve into the limits of the current model of justice and MCSs, as discussed in the paper by Cugueró-Escofet and Rosanas (2013). These authors argue that MCSs contain social dynamics that bolster or undermine the initial purpose for which they have been implemented. In that model, however, justice consequences have only been presented in terms of the different levels of goal congruence that are generated. We thus revise how organizational justice can be a framework for understanding justice reactions (ex-post justice in our jargon). We continue by showing how the model proposed by Cugueró-Escofet and Rosanas adds new elements to the current procedural justice model defended by Blader and Tyler and the social versus structural aspects of justice discussed by Greenberg. We then present an extension of the model by including ex-post justice as a consequence of the four different goal congruence types. In doing so, we include time effects, by presenting two possible fairness types: long-term and short-term fairness.
Management Control Systems and Goal Congruence

The main objective of MCSs is to achieve the greatest possible congruence between the goals of the organization, the goals of subunits and the goals of managers. In this way, by pursuing their personal goals, people are also pursuing organizational goals. It is widely accepted that some form of control (formal or informal) is exerted and necessary in every organization (Tannenbaum, 1968), although Otley and Berry consider the topic of control a much-neglected subject (Otley and Berry, 1980). Anthony defined management control as “the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives” (Anthony, 1965, p. 27), a definition that remained unchanged in his classic textbook (Anthony, Dearden, and Vancil, 1972, p. 3). Twenty-three years later, in a major revision of the 1965 book, Anthony adopted a different definition: management control is “the process by which managers influence other members of the organization to implement the organization’s strategies” (Anthony, 1988). The crucial point is the explicit recognition of the fact that managers “influence organizational members,” even though how that influence is exerted is not made very explicit. Needless to say (and as we shall see), formal measurement and incentive systems are an important part of this influence.

Eccles (1991) gives an even broader definition. Control, he says, is “about creating conditions which will improve the probability that desirable outcomes will be achieved.” In this definition, he stresses two points that stand in sharp contrast to the previous two: first, that control is probabilistic, i.e., the results of specific practices cannot be foreseen with any reasonable degree of accuracy; and second, that “objectives are not assumed to be set before they are achieved” (Eccles, 1991), i.e., outcomes should not be limited to previously set objectives because even better outcomes may be possible. Management control is therefore a world of uncertainties, and those uncertainties include the desirability of the objectives.

A formal control system can be defined as a management control structure (i.e., the structure of responsibility, properly specified and defined) and a management control process by which (1) goals and strategies are set and (2) converted to an annual budget for each responsibility center, (3) actual performance is measured and assessed, and (4) rewards and punishments are assigned to each responsibility center (Anthony and Govindarajan, 2003). In rapidly changing, highly uncertain environments, however, a formal control system can become a straightjacket. It is therefore important to include informal structures to influence the control process. Informal control is based on the notion of “informal organization” that originated in Barnard (1938) and which refers to the direct relationships between people in organizations that extend beyond formal organization charts and manuals. Specifically, Barnard describes informal organizations as encompassing “mores, customs, commonly held aversions, persistent beliefs, conventions, codes of morals, institutions and language” (Barnard, 1938, p. 145). For Barnard, the informal organization creates the formal organization, which in turn develops new informal organizations, which create new formal organizations, and so on. Both formal and informal organizations are therefore necessary, as formal organization provides for efficiency, while informal organization provides for communication and values (Rosanas, 2013).

A formal system cannot be ruled through formal controls alone, because managers exhibit some degree of subjectivity when using the system. In most control systems, therefore, there is a mix of formal and informal controls. Formal controls are the ones included in the MCS design, and thereby formalized, and informal controls are the ones included in the use of the system, depending on managerial subjective decisions and actions.
Goal congruence is defined as “the central purpose of a management control system” (Anthony and Govindarajan, 2003, p. 98). Thus, goal congruence is used to measure to what extent an MCS is appropriate or not. In behavioral literature, it is argued that MCSs are used to cope with uncertain environments instead of being used to create goal congruence (Chapman, 1998). In this respect, MCSs are “enabling bureaucracies” (Adler and Borys, 1996). Depending on the levers of control, Simons proposed four types of MCSs: beliefs, boundary, diagnostic and interactive systems (Simons, 1995). MCSs are designed depending on what managers wish to manipulate, by setting up controls in a consistent way to help them to do so (Marginson, 2002; Mundy, 2010; Simons, 2000; Widener, 2007).

The concept of goal congruence has evolved over time. The term total congruence was slightly adapted by Vancil, in that he proposes that MCSs must include objectives and measures to help people in management roles with their judgment when making decisions that must also be good for the whole corporation (Vancil, 1973, p. 77). For Anthony and Govindarajan, goal congruence should encompass individual self-interest, because it does not seem reasonable for an organization to ask people to behave against their personal self-interest. In that respect, Anthony and Govindarajan consider that a minimum goal congruence is needed, meaning that organizations must avoid the use of MCSs that promote actions which are against the best interest of the organization (Anthony and Govindarajan, 2003, p. 98).

Goal congruence has also received other names, although the concept clearly remains close to the one proposed in the MCS literature. Hurwicz, in the theoretical economics literature, coined the term “incentive compatibility” defined as the need to incorporate incentives from the individual point of view aligned with the objectives of the organization (Hurwicz, 1972). The limitation of incentive compatibility is that it considers only formal systems and tangible, quantifiable variables (e.g., not including, for instance, unselfish cooperation in organizations). Goal congruence is also very close to the concept of “organizational interest alignment,” defined as “the degree to which the members of the organization are motivated to behave in line with organizational goals,” which has been used by recent behavioral researchers (Gottschalg and Zollo, 2007, p. 420).

The Social Dynamics of Justice in MCSs: Creating Goal (In)Congruence

Initially MCS literature included contingency theoretical approaches, acknowledging the dynamic nature of MCSs, particularly when coping with specific situations that are unstable by nature (Chenhall, 2003). These dynamics have included the use of MCSs as promoters of innovation (Bisbe and Otley, 2004; Davila et al., 2009), as enablers to articulate specific strategies (Abernethy and Brownell, 1999), and as entrepreneurial tools to help start-ups grow (Davila, 2005). In that respect, the dynamic role of MCSs has been examined under the enabling use, in which MCSs help people interact to achieve the objectives they have in common (Abernethy and Brownell, 1997; Bisbe and Malagüeño, 2009; Bisbe and Otley, 2004; Simons, 1995; Simons, 2000).

The specific study of justice as a social dynamic has received little attention in MCS research. Justice has been recognized, jointly with goal congruence, as the main criteria for evaluating the use of MCSs (Vancil, 1973). We can consider Vancil’s theorizing as a good starting point to
discuss goal congruence with fairness. However, this is almost the only example where fairness and goal congruence are linked (Cugueró-Escofet and Rosanas, 2011).

Demski considers that only evaluation based on controllable performance can be considered to be fair (Demski, 1976). Later on, Williams discusses that accounting problems have a distributive nature and fairness is the concept required to distribute. He asserts that “deliberations involving fairness in accounting are actually inescapable” (Williams, 1987, p. 178). Williams considers that fairness needs to be included explicitly in the design of accounting systems and in how they are used. Pallot argues that fairness has evolved over time and that competing ethical frameworks need to be discussed when designing MCSs (Pallot, 1991). Other accounting literature considers fairness as an alternative goal from self-interest (Luft, 1997); this proposal is more aligned with other authors that reveal that justice and fairness can be strong motivators for people (Cropanzano, Goldman, and Folger, 2005).

The most comprehensive model for the social dynamics of justice in MCSs, to date, is discussed in Cugueró-Escofet and Rosanas (2013). The model proposed by Cugueró-Escofet and Rosanas can be summarized in Table 1 (the table is borrowed from their paper). MCS design can be formally just or formally unjust, and the use of the MCS can be informally just or informally unjust. This leads to a 2 x 2 matrix, as seen in Table 1.

**Table 1**

<table>
<thead>
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<th>MCS design</th>
<th>MCS use</th>
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<tr>
<td>Informally just</td>
<td>Maximum goal congruence</td>
<td>Occasional goal congruence</td>
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<td>Informally unjust</td>
<td>Perverse goal congruence</td>
<td>Minimum goal congruence</td>
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Formal justice is associated with the design of the formal control, whereas informal justice is associated with the control actions carried out by the decision maker. A control system design and a control use can be either just or unjust, while control actions can be either just (where the decision maker subjectively takes justice criteria into account when using the control system to decide on control issues) or unjust (where the decision maker does not subjectively take justice criteria into account). The two variables and the two levels for each variable give four possible combinations with respect to goal congruence.

A just design combined with unjust use leads to maximum goal congruence, a just design combined with unjust use leads to perverse goal congruence; an unjust design combined with just use leads to occasional goal congruence and unjust design combined with unjust use leads to minimum goal congruence. This model is interesting in that it can be accommodated to the contingency approach to MCS design and use, which considers MCS to be context dependent (Chenhall, 2003). The proposal of this matrix reveals that for a given company and situation it can change in absolute terms depending on possible external factors. Comparisons between the four types of goal congruence are still valid, however, since these can be considered as archetypical characteristics.
Their model is not without some limitations, though. The first one is that there is no explicit consideration of ex-post justice as a consequence of the four states of goal congruence that are generated. In that respect, the picture of the social dynamics of justice lacks the explicit inclusion of ex-post fairness. The second limitation is that there may be changes over time, and fairness consequences in the short run may be different from the ones appearing in the long run. We address both limitations by extending the model, specifically based on organizational justice literature.

**Theories of Justice and Organizational Justice to Understand Ex-Ante and Ex-Post Justice**

The model proposed by Cugueró-Escofet and Rosanas discusses mainly proactive justice, specifically in terms of informal justice, in which the manager uses the system in a specific way to create different states of goal congruence. But, one limitation is the non-specific inclusion of fairness consequences, i.e., how individuals receive the decisions and treatment of the formal system and the manager. We believe that organizational justice literature has focused mainly on justice perceptions, and we think it is worthwhile to briefly revise the existing literature before proposing a more complete model for the social dynamics of justice.

Organizational justice has focused on Human Resource Management Systems, to study the impact of HRM characteristics on how people perceive them as more or less fair (Folger and Cropanzano, 1998; Gilliland and Chan, 2001). When people perceive a lack of fairness, they are more likely to engage in behaviors that can retaliate against the organization, and thus undermine organizational goals. On the contrary, it seems that justice in the treatment people receive, by contrast, increases their commitment to the organization, bringing people together (Folger and Cropanzano, 1998).

Justice has been studied in philosophy, ethics, human resource management and management control. In general, we cannot preclude the study of philosophy, because, justice and justice perceptions are two aspects that must be reconciled, as both have specific roles in research. Philosophical inquiries have mainly attempted to answer questions about the characteristics that systems and acts need to have in order to be considered just, while empirical research has mainly addressed questions about whether people perceive different characteristics or aspects of a system as fair or not.

Applied to organizations, justice has been an important concept, and has been studied in two main ways. First, philosophical research has studied how just systems need to be designed and used to be just. And second, empirical research has addressed how people perceive the decisions delivered by such systems (justice perceptions). In general, empirical research has concentrated on ex-post justice and philosophy on ex-ante justice, two concepts that we would like to clearly differentiate, because both of them have specific and distinctive roles.

Aristotle’s main thoughts on justice are found in the fifth book of his Nichomachean Ethics (Aristotle, 2000). Aristotle’s thinking considers that justice is a quality of the system and of the decision maker. The framework established by Aristotle distinguishes between the justice of the legal system and the virtue of using these systems according to the law, but also going beyond the law with the intention of generating fair results (i.e. trying to apply the law taking into account personal circumstances). Aristotle’s thinking is interesting in that it clearly considers
the justice of the system and also justice in the use of the system. Following Aristotle, justice and fairness are needed because it is not enough to consider justice only as a static aspect of the system. Aristotle posits that being just consists of following the “spirit of the law,” which implies subjectivity on the part of the decision maker. Following Aristotle, a just design, used with the practical virtue of justice and fairness, tends to produce fair results (which does not imply that these results come immediately afterwards; sometimes, there has to be a conflict that can end in possible changes to the system). An interesting concept is Aristotle’s definition about the virtue of justice as a “state of character which makes people disposed to what is just and makes them act justly and wish for what is just” (Aristotle, 2000, p. 109). Both aspects are currently included in the model proposed by Cugueró-Escofet and Rosanas concerning proactive justice (or ex-ante justice).

In a more ideal vein, Plato’s approach considers justice as an ideal to be achieved, but which is never attained. People need to arrive at this ideal and be as close to it as possible. In general, debates between ideal justice and practical justice have continued. One example of this is a paper by Flyvbjerg, which discusses ideas by Habermas and Foucault based on those two positions: the ideal and the practical. Flyvbjerg considers Foucault to be a practitioner of phronesis, his emphasis being on practical rationality and common sense, whereas Habermas follows the tradition from Socrates and Plato, relying on constitution writing and development, and proposing the strength of the better argument as a possible rational solution for justice as an output of the democratic process (Flyvbjerg, 1998; Habermas, 1990).

Theories of justice can also be classified depending on whether they focus on content (Finnis, 1980; Kant, 1981) or on process (Habermas, 1990; Rawls, 1971; Rawls, 2003). Theories of both groups are normative, as they study which arrangements are necessary in order to implement a just society. Proactive or ex-ante justice needs to be interpreted on this normative side, by arguing how the system and the managerial use needs to be arranged in order to be just, whereas empirical research needs to validate whether the real consequences of systems provisions and use are really perceived as fair (ex-post justice), or can be argued to be fair (ex-post justice perceptions in the long run).

Rawls is the modern thinker who has exerted the greatest influence on modern thinking about justice. Rawls considers that fair results follow naturally when the design is just, since “a society is rightly ordered, and therefore just, when its major institutions are arranged so as to achieve the greatest net balance of satisfaction summed over all the individuals belonging to it” (Rawls, 1971, p. 22). This point of view is inconsistent with integrating empirical and normative research because it considers that if perceptions are against the system, they are always wrong. This is not realistic in view of how things usually evolve in society (e.g., if this is the case, apartheid could never be challenged as a result of people’s perceptions that considered it truly unjust).

Individuals typically follow their own perceptions and personal reasoning when deciding whether a particular arrangement produces fair results or not, and societal arrangements can evolve into more just ones if people consider that they are unjust. On the other extreme of normative researchers, we find the relativists. For them, justice and societal arrangements for justice, at a given time, are one and the same. They consider that what is good for people is right (Gauthier, 1986). The problem is that relativists preclude unjust systems to be judged as unjust (e.g., continuing with the same example of apartheid, the relativistic arguments will suggest that apartheid would be considered unfair only if the majority considers it to be, not otherwise). Relativists can legitimate a concept of justice that the majority “seems” to hold, when it could well be that it is merely the status quo.
Organizational justice has used the terms justice and fairness interchangeably because they are measures of “organizational justice perceptions,” which are shaped by relevant aspects of system design, outputs and use (Adams, 1966; Adams, 1965; Colquitt, Greenberg, and Scott, 2005; Colquitt, Greenberg, and Zapata-Phelan, 2005; Leventhal, Karuza, and Fry, 1980; Thibaut and Walker, 1975; Thibaut and Walker, 1978).

These definitions are very useful when discussing the consequences of MCSs, i.e., the ex-post justice concerning how people perceive justice. This inclusion of justice perceptions can add ex-post justice to ex-ante justice. We will now revisit the main concepts and then discuss a more complete model for the social dynamics of justice.

Perceptions of justice have been extensively studied (see for instance the following surveys, Fortin, 2008; Greenberg, 1987). The empirical evidence shows two things: 1) systems need to have certain characteristics in order to be perceived as just; and 2) managerial behavior and actions towards people must meet certain requirements in order to be perceived as just. This means that, subjectively, people care about the treatment they receive from formal systems, on the one hand, and from managers, on the other. The most widely used model of justice perceptions has been tested by Colquitt (Colquitt, 2001). Colquitt proposes a model with four types of justice: procedural justice, distributive justice, interpersonal justice, and informational justice.

Distributive justice is defined as the perceived fairness depending on the outcomes received (Adams, 1965); procedural justice, as the perception of fairness depending on the procedures used (Thibaut and Walker, 1975); interpersonal justice, as the quality of interpersonal treatment (Bies and Moag, 1986); and, finally, informational justice depends on the explanations received by the decision maker (Shapiro, Buttner, and Barry, 1994). These four types of justice combine to lead to overall fairness perceptions of justice, even if not all types of justice have the same effects (Colquitt, 2001). Although the actual outcome can be separated from the process of receiving it, there are obviously many links between the concepts of distributive justice and procedural justice. Some researchers even challenge the idea that they are different (Ambrose and Arnaud, 2005). Procedural and distributive justice types have sometimes been found to be interlinked, as people may sometimes accept a less favorable outcome if the procedures that delivered the outcome are fairer. The most common way of dealing with these different concepts of justice is to accept that if people can clearly distinguish between different aspects of justice, it may be useful to use different constructs for each aspect (Colquitt and Shaw, 2005). As we will see later on, here we can also apply the models of formal and informal justice (Blader and Tyler, 2003; Cugueró-Escofet and Rosanas, 2013), or the structural versus social taxonomy of justice discussed by Greenberg (1993). This classification may also be useful when applied to ex-post justice perceptions, to look at how people perceive the types of justice that are applied proactively. Even if the approach to justice in the management literature has been largely empirical, empiricists asked to what extent those theoretical concepts held true in reality and attempted to find empirical evidence for their existence, an idea close to the separation of ex-ante and ex-post justice supported in this chapter (Greenberg and Bies, 1992).
Contributions to Organizational Justice Literature: A Model of Formal and Informal Justice and a Comprehensive Model of Justice Dynamics

Cugueró-Escofet and Rosanas (2013) have introduced a model of formal and informal justice to explain social dynamics when using MCSs. The contribution of this model is threefold. First, they distinguish clearly between ex-ante provisions of justice in the design and use of MCSs and their consequences in the use of these MCSs, specifically in terms of goal congruence. Second, they distinguish between formal and informal justice, and how this is related to previous literature on MCSs that also distinguishes between formal and informal elements of MCSs, adding aspects of formal and informal justice that do not appear in organizational justice literature. Third, the model shows the evolution of MCSs as a result of using these systems with or without formal and informal justice. We think that there are also two salient contributions for organizational justice literature. The first contribution is the explicit distinction between formal and informal justice, contributing to the understanding of current models that have also explored this idea. The second contribution can be presented as an extension of the model by clearly separating ex-ante and ex-post justice, and including possible time effects.

1. Ex-Ante Justice: Contributions of Formal and Informal Justice in MCSs to Organizational Justice Literature

The concepts of formal and informal justice are closely associated to the ex-ante concept of justice, as these are proactive provisions of the system and the managerial use. In general, Cugueró-Escofet and Rosanas consider that formal justice does not suffice and they consider the inclusion of informal justice to be necessary, claiming it to be an unavoidable element of goal congruence creation.

In general, their definition of formal justice and informal justice can be accommodated to Blader and Tyler’s four-component model of procedural justice (Blader and Tyler, 2003). The Blader and Tyler model differentiates between authorities, also labeled the “procedural source” and procedures, also labeled the “procedural function.” Both aspects have respectively been considered to have a formal and informal influence on justice, because both can influence people’s overall perceptions of fairness. The model is interesting because, in viewing this new type of justice as an “informal quality of decision making,” it incorporates how managers can adapt procedures to attain fairer results. This is an aspect that was already considered in the informal justice proposed in the Cugueró-Escofet and Rosanas model, although Blader and Tyler concentrate more on adapting procedures rather than outcomes or any other resource. Blader and Tyler’s new type of justice, taken as a “formal quality of treatment,” can be seen as part of formal justice in the Cugueró-Escofet and Rosanas model, discussed in the formal aspects that MCSs need to take into account in order to be formally just.

Both types of justice considered in the paper by Cugueró-Escofet and Rosanas can also accommodate Greenberg’s work, which discusses the social side of fairness in contraposition with the structural side of fairness (Greenberg, 1993). In terms of structural justice, mainly concerned with procedures and distributive justice types, Greenberg’s model is quite similar to the one posited by Cugueró-Escofet and Rosanas, even if it later incorporates some new ideas regarding formal justice requirements. The social side proposed by Greenberg will be discussed later.
As far as formal justice is concerned, there are three new elements to be considered, the “minimum rewards” requirement, the “maximum level of pay inequalities” and the inclusion of injustice reparation, to recognize the imperfect nature of formal systems, and their implicit need for improvement over time (Cugueró-Escofet and Rosanas, 2013, p. 32). Reparation has already been considered an important short-term motivator, after an injustice occurs (Conlon, Meyer, and Nowakowski, 2005), and has also been studied as proper managerial behavior (Cropanzano, Bowen, and Gilliland, 2007; O’Malley and Greenberg, 1983).

On the proactive side, MCS literature has considered that formal controls are insufficient (Ouchi, 1979). Based on this, Cugueró-Escofet and Rosanas argue that relying exclusively on formal justice generates suboptimal MCSs, when the output is not measurable and the activities performed are not perfectly observable (Ouchi, 1979). More generally, contracts are incomplete, as it is impossible to set up a contract that anticipates every possible contingency that may arise from future fulfillment of the contract (Milgrom and Roberts, 1992, p. 256). Therefore, the informal dimension of justice in terms of use makes it imperative to go beyond formal justice requirements. Finally, people learn, and when individuals interact, using MCSs may change their views about the desirability of some anticipated future events (Ahrens and Chapman, 2004; Cugueró-Escofet and Rosanas, 2013).

The concept of informal justice proposed by Cugueró-Escofet and Rosanas is very close to interpersonal justice (Bies, 1987a; Bies, 1987b; Bies and Moag, 1986), even if it contains elements that have been traditionally considered a part of procedural justice, like “giving voice” (Leventhal, 1980). We have already shown that it is close to certain aspects discussed in Blader and Tyler's four-component model, when they talk about the quality of the treatment and decision making by the authorities (Blader and Tyler, 2003). Informal justice considered in the model is also close to the concepts of the social side of procedural justice (informational justice) and the social side of distributive justice (interpersonal justice), which have been categorized by Greenberg (Greenberg, 1993, p. 83). It is different, however, in the sense that information and interpersonal treatment may both be linked to the outcomes received (distributive justice) and the structure used (procedural justice). Greenberg's model is really important as it establishes the specific social aspect of justice by clearly detaching it from the formal structure. Cugueró-Escofet and Rosanas’s model adds the specific role of the informal part, without necessarily linking informational justice to the procedural social aspect and interpersonal justice to the distributive social aspect of justice. Informal justice is explained in terms of proactive justice, i.e., specific ways in which the manager can be considered to be fair when using the MCS.

There are some new aspects of informal justice presented in Cugueró-Escofet and Rosanas that can be worthwhile for organizational justice literature, and which expand the four components of organizational justice, specifically in terms of proactive justice. The first one is the inclusion of willingness on the part of managers to use the just system, and, more importantly, to actively pursue fairness in the results. One specific aspect of this (although not exclusively), can be the fact of carefully listening to the opinion of the individuals being evaluated using those MCSs (called giving voice to people). This willingness also encompasses proactively engaging in reparation policies to propose changes in the MCS design, directed toward increasing future formal justice. Another novelty of informal justice is the specific criterion of arbitrariness avoidance. The just use of an MCS should comment explicitly and explain the specific inequalities in any reward and recognition, and base them on well-argued criteria, in order to avoid arbitrariness. This is also a norm traditionally discussed in procedural justice literature, called “bias suppression” (Leventhal, 1980), even if in this case arbitrariness is a much more
demanding proactive characteristic of the manager, because it has to be backed up by specific arguments, not merely by the perception that the manager has no biases.

2. A More Comprehensive Model for the Social Dynamics of Justice: Ex–Ante Justice, Goal Congruence States and Ex–Post Fairness Consequences

In general, justice dynamics are important as they allow systems to improve over time, and in turn allow for increasing fairness in the results they can produce over time. To improve systems, it is necessary to distinguish ex-ante and ex-post justice. It is necessary to allow for future improvements of the system when actual formal systems are seen to generate unfairness.

Justice makes it possible to understand some underlying mechanisms or dynamics behind the (un)just use of an (un)justly designed MCS. It is precisely justice, and justice reparation that make the social dynamic possible. This model explains how the different combinations of formal and informal justice, which lead to the four different types of goal congruence, can generate fairness or unfairness. We need to go beyond goal congruence states to look at the fairness consequences of these four states of goal congruence, in order to see which states of goal congruence generate fairness consequences in the long term.

Building on the model of Cugueró-Escofet and Rosanas we propose an extension looking into the ex-post fairness perceptions created in the short and the long term. The model is outlined in Table 2, and we will explain each of the states of goal congruence and how fairness perceptions can be created in the long and the short run.

Table 2

Combinations of justice in the design and use of MCSs: short-term and long-term fairness consequences

<table>
<thead>
<tr>
<th>MCS use</th>
<th>MCS design</th>
<th>Formally just</th>
<th>Formally unjust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informally just</td>
<td>Maximum goal congruence</td>
<td>Occasional goal congruence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>short-term and long-term fairness</td>
<td>short-term (un) fairness &amp; long-term fairness</td>
<td></td>
</tr>
<tr>
<td>Informally unjust</td>
<td>Perverse goal congruence</td>
<td>Minimum goal congruence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>short-term (un) fairness &amp; long-term unfairness</td>
<td>short-term and long-term unfairness</td>
<td></td>
</tr>
</tbody>
</table>

The dynamics of the model presented have immediate concerns in terms of fairness consequences. In any particular situation, when a situation of unfairness is perceived, people tend to look at the actual design of the system and propose introducing new rules to improve fairness perceptions (Cropanzano and Byrne, 2001). It is clear that the focus on MCS design is the first step, but we have presented that it is even more important to look at how people use the system. Why? Because the willingness to be just is a more powerful engine of change than
the most “perfectly” designed MCS (Finnis, 1980). This can entail adding a new rule or other type of action like increasing coherence among rules or even eliminating an unjust rule.

It is important to note that the emphasis needs to be put on the use of the system, because informal justice is what makes the future updating of the MCS design possible. The subjective element that informal justice introduces is crucial and essential to achieving stable goal congruence and full identification with the organization on the part of organizational members, both of which are considered core objectives of management control systems (Cugueró-Escofet and Rosanas, 2013).

We need to strive against the simple argument of putting emphasis on the formal system and instead considering ways to train managers in informal justice, because this is a better way to achieve better alignment between people and the organization, thus creating long-term fairness.

Looking at Table 2, for the two stable states, the maximum level of goal congruence will lead to maximum short and long-term fairness and the minimum level of goal congruence will lead to minimum short and long-term fairness consequences.

For the two unstable goal congruence states, the situation is quite different. And it makes things interesting because fairness and unfairness in the short run can be present in both states, in cases of perverse goal congruence and occasional goal congruence. The difference between both types of goal congruence can only be shown in the long run, when perverse goal congruence will create unfairness, whereas occasional goal congruence will result in fairness.

*Maximum Goal Congruence: Short-Term and Long-Term Fairness*

When an MCS is designed with formal justice and used with informal justice, goal congruence achieves its contingent maximum. This maximum cannot be considered an absolute maximum, but a contingent maximum for a specific organization at a specific moment in time. It is therefore considered particular to an organization embedded in a particular moment of its organizational life.

Maximum goal congruence is created when, looking into the four types of control systems that exist (belief, boundary, diagnostic and interactive systems), the formal MCS design is consistent with its use (Simons, 1994). When managers’ actions are consistent with the system design, some degree of flexibility and balance is included, which is part of justice as a virtue, defended by the philosophers of justice (Aristotle, 2000; Posthuma and Dworkin, 2000).

Maximum goal congruence is a stable state; an external disruption is required to change it. In general, individuals can find appropriate mechanisms within MCSs and with the people who manage them, in order to express themselves and ask for injustice reparation. Fairness in the results is present in the short and long run.

In the case of maximum goal congruence, if people do not perceive fairness, they can appeal to the managers' informal justice. In this case, the subjective dimension of informal justice can take immediate care of fairness consequences, and the manager will strive to generate fairness after unfairness has happened. Unfairness in the short term can be considered not present, as it lasts almost no time. That is why we consider it to be a long-term fairness situation almost from the beginning. We can summarize it in the following proposition:
**Proposition 1:** Maximum goal congruence will create short and long term fairness and will be a stable situation that continues if no disruption is present.

**Occasional Goal Congruence: Short-Term (Un)Fairness and Long-Term Fairness**

This state is the most common one. In general, many organizations have imperfectly designed MCSs: typically, formal systems need to be updated from time to time to incorporate new aspects of justice or to remove provisions that have been proven unjust. Occasional goal congruence is the consequence of having informal justice and an imperfectly designed MCS in terms of formal justice. Some empirical evidence has shown that managers who are willing to act justly take into account ways of repairing injustices once they have been perceived (Croppanzano et al., 2007). In this situation, managers act in an active way to promote a future increase in formal justice, and to possibly end up in the situation of maximum goal congruence.

In fact, managers begin by proposing changes to the system, and they subjectively repair the unfairness people have perceived and evaluate it, proposing future system changes. Every time managers use the system, they learn how to use it more fairly, finding new ways to repair the possible unfairness the system creates. Managers acquire evaluative learning as they first repair the injustice; afterwards they may start to propose changes for those parts of the system that have been proven to be unjust. In the short term, the formal system can create unfairness or fairness consequences. In the long run, the situation will be that of fairness, because the managers will attempt to remove unfairness from the system, thus improving it until they have transformed it into one that creates short and long term fairness.

The social dynamics of justice in this case can be explained in terms of the virtuous circles that informal justice generates. Informal justice increases the formal justice of the system, though there may be short-term unfairness, and as a result the possible injustices contained in the MCS design can be removed, transforming the system into a more just one (Ashton, 1976; Maruyama, 1963; Weick, 1979; Wender, 1968).

It seems clear that there may be unfairness perceptions in the short term having to do with the system, but sometimes they can be mistakenly taken for other perceptions. It is important to be cautious to not to implement proactive policies that look only into the short-term perceptions. We can summarize it in the following proposition:

**Proposition 2:** Occasional goal congruence can create short term (un)fairness and will create long term fairness.

**Proposition 3:** In occasional goal congruence, managers are conscious of the short term unfairness and, through it, they attempt to transform the system into a formally just one.

**Perverse Goal Congruence: Short-Term (Un)Fairness and Long-Term Unfairness**

This state is also very important in terms of the dynamics of justice that are created. Perverse goal congruence is unstable. In this case, the MCS design is just and the system is unjustly used. For that reason, there is room for dysfunctional learning. In general, when people receive unfair consequences from the use of MCSs, they perceive them. Usually, they will demand changes to the system in order to establish stricter rules (Hopwood, 1974; March and Simon, 1993). If this is the case and people ask for more rules, even if the aim behind them is to be treated more justly, it can have the opposite effect, because the organization will end up in a
legalistic situation (Sitkin and Bies, 1993). In this type of situation, in which rules are added very quickly, it is difficult to ensure that the new rules will be in keeping with the logic of the existing ones. The probability that new rules may contradict the existing ones will interfere in future perceptions of fairness associated with the decision process. Managers incorporate the rules because they are more interested in appearing just than in actually being just, since the situation is one of informal injustice and, therefore, the rules that are incorporated will surely worsen the formal justice of the MCS (Sitkin and Bies, 1993).

This situation will tend to deteriorate as it is unstable: the ex-post unfairness is not effectively repaired, even if MCS formal justice includes mechanisms for repairing injustices. This is because instead of replacing unjust rules, there is a mere increase in their number, without harmonizing the content (Cropanzano et al., 2007).

The dynamics of informal justice are similar to those explored for occasional goal congruence, but in this case the effect amplified is negative, as it starts with the unjust use of the formally just system (Ashton, 1976; Maruyama, 1963; Weick, 1979; Wender, 1968). The end of the process is to enter into a loop of mutual deviation amplifying effects, which makes the situation of minimum goal congruence into a future stable state.

This case is particularly interesting, because it is one in which the social dynamics of justice clearly create consequences that can go against the possible development of core competencies, because people do not receive what they deserve according to the contribution they make, and thus will quit for a more favorable organization with a more consistent system of rewards.

It will be only a matter of time before the organization is destroyed. The process will end in a situation that is very stable, because there is usually no motivation to improve it. The consequences of what we have explained above are very important for management control systems and organizational justice literature. Even if there is a widespread idea that when an injustice appears people tend to put the emphasis on system design, which calls for the introduction of new rules to increase the level of justice, when it comes to the social dynamics of justice, how people use the system is more important, because the willingness to create fair results is more powerful than a perfectly formally just system (Cugueró-Escofet and Rosanas, 2013).

In perverse goal congruence, since there is formal justice, the unjust use of the MCS can generate unfairness that always needs to be “solved” by the system itself. As a result, it may be difficult to distinguish this state from the occasional goal congruence only by looking at fairness perceptions in the short run. Therefore, if we look at fairness perceptions in the case of perverse goal congruence, perceptions of fairness may well be high, even if in the long run these perceptions will prove to be untrue, because the dynamic evolution will make them evolve towards a state of maximum unfairness. This is another argument in favor of looking at perceptions with caution, as sometimes they can be misleading and might lead managers to take the wrong action, making the future consequences worse and worse. We can summarize this in the following proposition:

Proposition 4: Perverse goal congruence can create short term (un)fairness and will create long term unfairness.

Proposition 5: In perverse goal congruence, managers solve the short term unfairness they have generated by changing the just system and transforming it into a formally unjust one.
Minimum Goal Congruence: Short-Term and Long-Term Unfairness

In the case of an MCS with an unjust design, which is also used unjustly, there will be a situation of minimum goal congruence. In general, organizational members will not identify with the organization. People tend to perceive injustices that are not considered by their managers, and these create consequences that are intended to damage the organization (Brockner and Greenberg, 1990; Greenberg, 1990). The problem is that this type of situation is very stable and it tends to deviate very little if there are no important changes from the outside or the inside. Misalignment makes people feel motivations against the organization (Gottschalg and Zollo, 2007). This situation is stable because there is consistency between the system use and the design. When the MCS is used, the organization continues deteriorating and people either plan to leave the organization or else they survive inside by isolating themselves and alienating themselves from the goals the organization sets.

With minimum goal congruence what happens is the opposite of what happens with maximum goal congruence. In this case, unfairness accumulates from the beginning, so we can consider that the long term begins today.

Proposition 6: Minimum goal congruence will create short and long-term unfairness and will be a stable situation that continues if no disruption is present.

Discussion and Conclusions

The extended model presented here can be empirically tested. Specifically, it is possible to test whether a particular combination of just/unjust design and use actually results in a particular goal congruence state, and how this goal congruence state can, in turn, create short or long-term fairness. This empirical research could be done using cross-sectional data, but we think it would be more useful to find longitudinal data, as our approach also considers the dynamics of the four states.

We mentioned that more recent literature has taken note of possible links between fairness perceptions and control systems. In the first model presented in the research by Cugueró- Escofet and Rosanas, they first attempt to formulate a theoretical explanation for how justice can be applied to MCSs, and link that to different levels of goal congruence and identification over time. This allows them to establish a theoretical grounding for justice at the core of the literature on management control systems. This extension also presents how different levels of identification and goal congruence can promote just applications.

But they have recognized, and we also recognize this in the current extension, that there is the need to test some parts of the model empirically. We specifically assert that some hypothesis testing can be fruitful, which may be able to elicit empirical evidence of how the four states of goal congruence (two of them clearly dynamic) can contribute to generating fairness. The explicit separation in how systems are proactively designed and used following justice requirements, and whether people perceive these requirements to be just, is an interesting point that has not been explored in justice literature.

Empirical evidence will increase our knowledge of the matter and show to what extent their proposal reflects reality. It will also help to refine the proposed framework. Eventually, it could lead to an extension of some of these theoretical explanations to cover other aspects of justice in control systems that have not been explored yet.
We have already proposed some propositions for each type of goal congruence and its fairness consequences. We think that these propositions can serve as the basis for developing some testable hypotheses.

Conclusions

In this paper we have attempted to show a possible explanation for the dynamics of justice, bringing together the classical literature on management control systems and the literature on organizational justice. We have shown that formal and informal justice in MCSs, when combined, generate dynamics that produce different levels of goal congruence, two of them stable and two of them unstable, which in turn generate different short-term and long-term fairness consequences. We have discussed formal and informal justice requirements and the new ideas that are emerging, which have not yet been included in organizational justice literature.

We have shown that separation of ex-ante and ex-post fairness is worthwhile. Including both types of ex-ante justice (formal and informal), and detaching them from fairness in the results of applying MCSs, makes the social dynamics explanations clearer and allows for possible future improvements of the MCS's formal justice. Justice creates goal congruence, which in turn creates possible fairness and unfairness and which can eventually affect future formal and informal justice in the MCS design and its use.

The model argues for a deeper conceptual framework, which can explain the social dynamics of justice, showing the interplay between formal and informal justice and injustice, and how they result in different possible levels of goal congruence. It is helpful in that it considers that subjectivity is unavoidable, and that formalization has limitations, and as they argue “making the notion of a perfect mechanical design that needs no people and creates a stable situation of goal congruence unrealistic” (Cugueró-Escofet and Rosanas, 2013).

We think that our analysis here allows for a deeper understanding of the dynamics of justice, and shows how these dynamics come to light when using MCSs. Particularly, justice is seen as a very important element of an MCS that is viewed as crucial to achieving stable estates of goal congruence and long-term fairness. It is also important to show that it can be seen the other way around, that the use of MCSs generates dynamics that will change the formal and informal future justice of systems, depending on the goal congruence achieved and the fairness consequences this goal congruence entails.

Another important message regarding the social dynamics of justice is that they show motives to understand why subjectivity is unavoidable; making the notion of a perfect mechanical design, which does not require people and creates a stable situation of goal congruence, unrealistic. In fact, having trained people who are willing to be just, can be the starting point for generating a better MCS and eventually fairer organizations.

Summarizing, the main contributions have been to explain the social dynamics of justice by distinguishing between ex-ante justice and ex-post justice. The second point has been to examine ex-post justice in depth, showing the short-term and long-term consequences of the four states of goal congruence. Another important point has been to explicitly uncover new aspects of formal and informal justice requirements that can contribute to the literature on organizational justice in terms of proactive justice design and use.
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