Employee Values and Preferences:
What Effect on Organization Design?

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1. Introduction

Cooperation, reciprocity, trust, truth-telling and virtuous behavior are ubiquitous in organizations, yet competing when cooperation is called for, distrust and bad behavior are also observed, albeit much less frequently. Is it that “nice” people engage in the laudable behaviors and “not-nice” people engage in detrimental behaviors? Nice people sure do nice things, but they don’t always do nice things or cooperate: for example, they may withdraw cooperation in response to what they perceive as negative behaviors. Not-nice people also do nice things and often cooperate because of incentives to do so. Observing how people in actual organizations behave does not provide a clear clue as to who is who, what motivates employees, and what their intentions towards others may be. In actual organizations, much effort is going towards prevention of unwanted behaviors and encouragement of desirable behaviors through organization design: incentives, monitoring, hiring, promoting, firing, and much more. Those who believe in the ubiquity of self-interested behavior are therefore not surprised by the extent of good behavior observed in organizations, because it is directed by self-interest. Similarly, those who believe that individuals are benevolent and driven by values find support for their beliefs from the same facts. Good organization design aims to ensure that nice people and not-so-nice people behave in ways that are compatible with organizational goals.

Organization design needs to be built upon assumptions about what the people that populate organizations are about “in the raw,” before the application of organization design. It is intuitive that nice people and not-nice people will be guided to pursue organizational goals through different organization design. In this paper I ground this intuition in an analysis of organization design relative to alternative profiles of employee values, and show that organization design depends very much about the assumptions one makes about the nature of employees, and that a mismatch between organization design and employee inclinations results in losses in
performance. The paper thus argues, as does Ghoshal (2005), that theories of organization design that are anchored in bad theories about human nature lead to bad management theories and practice.

Individuals’ extended preferences that include their motives, intentions and attitudes towards others and values determine how they respond to various institutions and stimuli, such as how they react to a supervisor’s request to work harder, whether or not they help a coworker when their action is not observed by a supervisor, whether and how they reciprocate a kind or unkind act aimed at them in the past, how they use their autonomy when not observed by other individuals, and much, much more. Extended preferences consist of self-regarding preferences – self-interest, other-regarding preferences, and social or process-regarding preferences or values such as honesty, reciprocity, trusting, trustworthiness, truth-telling and fairness. Preferences shape individuals’ responses to their environment. Understanding how individuals react in diverse circumstances is necessary for the design of good institutions and business organizations.

To illustrate this, consider a profit-maximizing organization where management assumes that all its employees are self interested, and do not care at all about others and have no social preferences, so they will do anything as long as that will promote their own well-being, versus the alternative assumption that employees are mostly self-regarding but they care about their coworkers to a certain degree, and they are reciprocators and trustworthy even if this violates their self-interest, short and long term. Should organization design differ under these alternative assumptions about the preferences of employees? The main argument of this paper is that “yes,” organization design will differ significantly even under the mild differences postulated above. Organization design for a workforce consisting of fully selfish and value-less employees will be more complex and expensive than organization design for a workforce of employees who care a

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1 A similar argument is presented by Nahapiet, Gratton and Rocha (2005). These authors emphasize striving for excellence and focus on cooperation, whereas in this paper I evaluate multiple elements of organization design relative to delegation of decision-making, incentives and monitoring.

2 Of course, they will not cheat or steal or shirk if the expected value of such activities, given the probability of being caught, is lower than acting straight.

3 Such employees give back some proportion of what they receive in anonymous interactions that do not involve reputation and their reciprocation cannot be rewarded and lack of reciprocation cannot be penalized or even morally or socially censored.
little about their coworkers and have some regard for values. Organizations with the latter kind of employees will be more productive in environments that require team work and where monitoring and individual rewards are difficult to apply – in other words, in the large and advanced swaths of the modern economy.

Consider now a more realistic assumption regarding the workforce, namely that it consists of different types of employees in terms of their preferences, but there are no observable indicators as to which type a particular employee belongs. How will such heterogeneity of preferences affect optimal organization design? I argue that heterogeneity of preferences will generally drive organization design towards the more self-interested and less value-driven employee, and that workforce heterogeneity complicates significantly organization design.

Furthermore, organization design may be unstable, especially with employee heterogeneity, as design may affect workers’ preferences. For example, it is possible that continuous exposure to financial incentives through individual pay-for-performance may enhance self-regarding preferences at the expense of other-regarding preferences, and possibly weakening process-regarding preferences. Hence the problem of organization design is a complex problem in dynamic optimization under uncertainty.

The paper is organized as follows. Section 2 discusses the concept of extended preferences and discusses alternative profiles of employee preferences. It then argues that organization design depends tightly on the preferences of employees. The commonly-assumed preferences in the economic literature and likely in practice – strict selfishness – imply rather different organization design than less extreme selfishness combined with regard for others and for social norms. The analysis, focusing on a profit-maximizing organization that employs a technology and business strategy that make for a complex and interdependent task environment, analyzes organization design relative to different assumptions about employee extended preferences. I conclude that a mismatch between organization design and preferences implies suboptimal design, which means lost productivity and profits. Furthermore, employee preferences can be ranked in term of their effect on outcomes. Section 3 concludes with a discussion of the limitations of this paper’s analysis, and with a suggestion for a research agenda that links preferences and organization design.
2. Organization design relative to alternative employee preferences

Organizations employ various measures to engage and direct employees’ efforts towards the promotion of organizational goals. These measures include the nature and degree of allocation of decision-making rights to employees, the kind and strength of incentives and the level of fixed pay, the way and the extent to which employees are monitored by their supervisors, the length of tenure, and more. These measures are collectively termed organization design or organization structure (see Ben-Ner, Neuberger and Montias, 1993 and Ben-Ner, Kong and Lluis, 2007).

The standard economic assumption about individual preferences – self-interest and rationality – has been successfully challenged by behavioral and experimental economics and it is now, to a degree, used as a simplifying assumption that is know not to reflect perfectly reality. Yet much of the economics literature on incentives, allocation of decision-making, monitoring, and other aspects of organization design has been affected little by the evidence accumulated by experimental economics. The behavioral and experimental literature, which presents ample evidence that experimental subjects or employees in field studies do not act as fully self-interested individuals but care about others or have social preferences, is still at the stage of criticizing economic theory rather than building alternatives to it (e.g., Bandiera, Barankay and Rasul, 2005 and Fehr and Falk, 2002). Transaction costs and new institutional economists have discussed organization design relative to a view of individuals that recognizes that self-interest is not unalloyed, that non-calculative trust exists, and that these and values do make a difference to organization design (e.g., Williamson, 1985, [cites]). However, to my reading of the literature there has not been an attempt to ground comprehensive organization design in a broad view of employee preferences. The literature on organization theory and behavior in management and sociology, although recognizing that there is more to individuals than their self-interest (and sometimes not seeing self-interest), often makes assumptions about different aspects of individual preferences that are not carried through to an analysis of their impact on organization design (see, for example, leading textbooks in organization theory, Hodge, Anthony and Gales, 2003, and Baron and Kreps, 1999). Nahapiet, Gratton and Rocha (2005) are among the few management theorists who confront explicitly the relationship between preferences and organization design, albeit in a more restricted fashion that this paper.
The details of organization design depend on three principal contingencies: (1) the organization’s goals, (2) the implications of the organization’s production technology and business strategy for employees’ task environment, and employees’ preferences. This section explores some of the ways in which design depends on employee preferences. The first subsection examines the range of employee preferences and develops four employee profiles. Following subsections analyze the dependence of organization design on the four profiles of employee preferences in the context of a profit-maximizing organization that has a complex and interdependent task environment.

**a) Employee preferences**

The common representation of employee preferences in organizational and labor economics concerns income and effort. Both arguments refer, of course, to the employee. I will refer to these as elements of the *self-regarding preferences*.

An employee may have concerns about the well-being of other employees, supervisors, management, shareholders, or the organization as a whole. Such concerns may be termed *other-regarding preferences*. When the argument of preferences is income (or anything else that is rival), then the weights of self-regarding and other-regarding preferences must add up to one. So the statement that an employee is equally self-regarding and other-regarding implies that she would split her income equally with the ‘other.’ The interaction with others may regard activities that are not rival in nature, but on the contrary, entail cooperation, such as working with another employee. In such circumstances, the degree and direction of the other-regarding preference may have implications for the way the interaction is executed and to its productivity. The ‘other’ may be a single individual, or members of one’s work team, members of another work team, and so on. The strength (and even the direction) of other-regarding preferences varies with various dimensions of the others’ identities and the context in which they are exercised.

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4 An expansive discussion of self-, other-, and process-regarding preferences, including their evolutionary psychological and biological sources, can be found in Ben-Ner and Putterman (1998).

5 This representation can be augmented by adding other elements associated with the workplace, such as a distinction between monetary income and non-pecuniary rewards, and among different kinds of effort that have different weights (including the possibility that some generate utility and others, as in the standard case, disutility).

6 Ben-Ner, McCall, Stephane and Wang (2007) examine variations in the strength of other-regarding relative to different dimensions of others’ identity, such as similarity and difference in ethnicity, gender, cultural preferences, religion, etc. in dictator games as well as in work and social contexts.
The relationship between self- and other-regarding preferences with respect to money has been extracted in numerous dictator game experiments, where the ‘other’ is either unspecified, as it is in the vast majority of experiments, or variously identified as man or woman, or diverse ethnic, cultural and other characteristics. The range of mean giving from an endowment of $10 is from about $1.5 to a stranger to $4.5 to a family member, with an average over many experiments around $2.8.\(^7\) Of course, giving in the dictator game is not only about self-regarding versus other-regarding, but may involve fairness in the distribution of a windfall, and so on. Hence, in percentages, one may speak very roughly of 80% self-regarding, on average.\(^8\)

While pursuing their self- and other-regarding preferences employees may show some normative restraint, and may react to the actions of others even if that does not bear on or actually harms their self- (or other-) regarding preferences. Such behavior is guided by concern for process rather than outcomes, and the preferences that govern it are titled social or process-regarding preferences. Process-regarding preferences include trusting and trustworthiness, cooperation, attitude towards fairness, honesty and attitude toward lying, and so forth. For example, a trustworthy worker will not shirk even if she knows that her shirking will not be detected. An employee lacking process-regarding preferences is one who does not cooperate unconditionally, does not trust and is not trustworthy unless there is an expected gain from reputation and such, the notion of fairness does not affect her decisions, lies when it is expedient to do so (i.e., it pays given the probability of detection and the associated cost), and so on. Process-regarding preferences seem to vary with the identity of the partners to an interaction; for example, the inclination to reciprocate (both good and bad actions) and to trust may be stronger towards members of one’s in-group than towards members of an out-group.\(^9\)

It is possible to infer the approximate strength of process-regarding preferences from the large experimental literature that documents their existence. Although experimenters use different protocols and subject pools, there is broad consistence among their findings. To characterize

\(^7\) Ben-Ner, McCall, Stephane and Wang (2007) for description of a relevant dictator game experiments and findings.

\(^8\) In a study on the effect of relative versus absolute incentives, Bandiera, Banakay and Rasul (2005) found that employees attach $xx to their own utility in association with [a unit of effort] and $xxxxxxxxxxx to the utility of their coworkers, from which one can compute [80%] self-regarding preferences.

\(^9\) See, for example, Fershtman and Gneezy (2004), and Guth, Levatia and Ploner (2007).
reciprocity, trusting, and trustworthiness I will use results from relevant experiments colleagues and I conducted at the University of Minnesota. Reciprocity may be pegged at an average of 80%, that is, an individual receiving anonymously an unsolicited dollar from an unknown person in a one-shot game would give to that person, should the opportunity arise, also anonymously and without the expectation for further encounters, $0.80.10 Trusting averages about 70%, in the sense that playing a trust (investment) game with a $10 endowment, trustors send on average $7 that will triple when it reaches a trustee who also has a $10 endowment, and trustworthiness averages about 50%, i.e., trustees return about half of what they receive (after tripling).11

Using the means described above as benchmarks, I develop four preference profiles, assuming different combinations of the three classes of preferences and of their elements. Each profile is characterized as follows:

- degree of self-regarding, characterized as x% an employee would retain in a dictator game with $10 endowment;

- degree of other-regarding, characterized by y% an employee would send to employee or group A, z% to employee or group B, and so on, in a dictator game, with y, z etc. adding up to 100-x%);

- extent of process-regarding preferences: reciprocity, characterized by w% sent in a dictator game to someone who was his/her own sender in a previous unconditional dictator game, both players having a $10 endowment; trusting , characterized by k% sent by trustor to trustee in a standard trust game in which both trustor and trustee have an endowment of $10 and in which the amount sent by the trustor sends is tripled by the time it reaches the trustee, and trustworthiness, characterized by the g% returned by trustee.

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10 See Ben-Ner, Kong, Magan and Putterman (2004) for such an experiment and empirical findings on the degree of reciprocity.

11 See Ben-Ner and Putterman (forthcoming). In this particular experiment, when the trustee returns one-third of what she receives from the trustor (after tripling), the trustor earns exactly his initial endowment; when she returns two-thirds, they both make exactly the same gains. There are significant differences in the degree of trusting and trustworthiness associated with communication and other treatments, which are beyond the scope of our discussion here.
This is a narrow specification of process-regarding preferences, and omits values, virtues and vices such as lying and attitudes towards fairness. However, for purposes of illustration of the idea of dependence of organization design on employee preferences this specification is probably sufficiently rich.12

I will assume the four specific preference profiles listed in Table 1. The profiles illustrate different types of employees. The P1 profile is just selfish, and is the type used in much of economic analysis. Employee type P2, who is just as selfish as P1, differs in that he may be called a civil employee in the sense that he reciprocates, trusts and is trustworthy to a limited degree but below the average values I described earlier. The third type of employee, P3, possesses approximately average preferences: he cares mostly about himself and a little about his coworkers, has an average inclination to reciprocate, to trust and to being trustworthy. Profile P3 reflects what one may term a decent employee, one who cares about others but not to the point of self-effacement, one who reciprocates strongly but imperfectly so, one who trusts most of his endowment in an anonymous interaction when the promise of gain – but also the risk of loss –is high, and one who is trustworthy in that he does not take advantage of trust placed in him implicitly.13 The fourth profile is a version of what Whyte (1956) famously termed “the organization man,” whose ideology is that the organization is a benevolent entity to which one must show allegiance and trust.14 Employee P4 cares mostly about the organization rather than himself, and reciprocates, trusts and is trustworthy above the average.

These four profiles characterize individual employees. In what follows, I will assume first that the workforce of the organization is homogeneous, composed alternatively of employees with P1, P2, P3 and P4 preferences. Next, I evaluate the cost associated with making incorrect assumptions about the preferences of the workforce, for example, assuming that it consists of P1

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12 Moreover, there might substantial correlation between the preferences included in the profiles and other preferences.

13 When simple written communication is allowed so that individual actions can be discussed and non-binding promises can be made, the average percentage returned by trustees rises substantially, as does the amount sent by trustors (Ben-Ner and Putterman, forthcoming, and Ben-Ner, Putterman and Ren, 2008). This will be important in later discussion of teams.

14 “When a young man says that to make a living these days you must do what somebody else wants you to do, he states it not only as a fact of life that must be accepted but as an inherently good proposition” (Whyte, 1956).
employees and designing the organization accordingly, whereas actually it consists of P3 type employees. Finally, I assume that the workforce is heterogeneous, and then examine alternatively a workforce composed of half P1 employees and half P3, then 20% P1 and 80% P3, and additional combinations. These are obviously arbitrary choices drawn from a continuum of possibilities, but represent useful examples for analysis. Table 2 presents a summary of organization design for different types of employees.

b) Organization design for a homogeneous workforce of “just selfish” P1 employees

Organization design consists of measures that are put in place in order to get employees to pursue the goals set by the organization’s principals. The practices include allocation of decision-making to different employees (and thus the creation of a hierarchy), provision of diverse forms of pay and incentives, monitoring of employees by their supervisors or peers, hiring and firing procedures and rules, and much more.

In the interest of brevity and simplicity, I will examine here organization design at the level of the workplace (thus omitting relationships among units) in a profit-maximizing firm that employs a business strategy and production technology that imply considerable task complexity for individual employees as well as interdependence among the tasks of employees.

I will focus on three key organizational practices: allocation of decision-making to employees relative to their supervisors, incentives, and monitoring. Allocation of decision-making to employees reflects different degrees of delegation of decision-making to them from supervisors, either as individuals or as teams (which can vary in size). Incentives vary along several dimensions, principally whether they target individuals or groups (small, large on the entire firm), and whether the incentives reflect pay for performance such as piece rate, or pay relative to other employees performance, including tournaments, or efficiency wages. Monitoring may be targeted at employee effort or employee results, and may be performed by supervisors or by peers. I discuss organization design for P1 employees in considerable detail because it lays the ground for probing the difference between design for P1 and employees with some measure of extended preferences.

15 These practices are considered central by many economists, and those who take a broader view of organization design, such as Prendergast (2002) and Lazear and Oyer (2008), examine these three practices.
Prendergast (2002) investigates theoretically and Ben-Ner, Kong and Lluis (2007) examine empirically organization design for a profit-maximizing firm where employees with ‘standard’ preferences (P1) work in an environment where tasks are complex. Task complexity creates asymmetric information between employees and their supervisors because employees have specific local information that is difficult to transmit; furthermore, this information may change rapidly requiring frequent reporting to supervisors to enable them to make current decisions. This situation consumes a lot of resources in preparation of information and its transmission from employees to supervisors, requests for clarification, and so on, leading to a cumbersome process of decision-making by supervisors. In such circumstances, delegation of decision-making to employees is the preferable solution.16

However, P1 employees will not be trusted with autonomous decision-making because they have an interest in exploiting their informational advantage to better their conditions: working less hard, pursuing projects of interest to them, and the like. To get employees to work more reliably on behalf of organizational rather than personal goals, incentives and monitoring may be added to the simple organization design, as well as limiting the degree of delegation of decision-making. The incentives will be of the pay-for-performance kind,17 as suggested in standard agency theory, but the efficacy of such incentives is limited by the feasibility and cost of monitoring performance. As noted, the greater the complexity of tasks the greater will be the degree of asymmetric information, which was the factor that also increased reliance on delegation, which in turn necessitates stronger incentives.18 The increased marginal cost of monitoring of performance and the possibly rising marginal cost of incentives generate a demand for additional types of incentives such as rewarding relative performance. These do not reduce the need to monitor results, but create another type of incentive which may strengthen individual

16 It is convenient to assume that workers are skilled and are fully capable of making competent decisions. An alternative assumption would be that workers are insufficiently skilled to enjoy fully-delegated decision-making. This would not change the direction of the argument in the rest of this paper, but only the degree of delegation and associated practices.

17 Efficiency wages of the type suggested by Akerlof (1980), grounded in the employer paying a higher wage and the employee returning the gift of unverifiable effort, are not feasible because the P1 employee does not reciprocate.

18 Prendergast (2002) shows that for low task complexity (low uncertainty) monitoring will be used, at moderate levels of complexity pay-for-performance incentives will be also be added, and at high levels of complexity only incentives will be employed because of the high cost of monitoring.
effort. In general, the degree of delegation of decision-making will be less than the level that would be chosen in the absence of the agency problem.¹⁹

Let us an additional aspect to the task environment, **interdependence**, which is another central feature of the contemporary workplace. The tasks of employees may be interdependent in several ways. In serial interdependence one employee’s completion of a task is a necessary input in the task of another employee, whose work is required for the completion of the next employee in line, and so on, as is the case on an assembly line and in certain clerical jobs. Serial interdependence can be coordinated by a supervisor who ensures that each employee completes his task properly and passes on his input to the next employee in a correct and timely fashion.

In mutual interdependence, employees work together and exchange opinions or pass on, back and forth, parts of the production process so as it incrementally approaches completion; this is the case, for example, in a research group, a complicated consulting project, and a surgery that requires the collaboration of employees with different skills. In this section we are concerned with mutually interdependent tasks. Mutual interdependence necessitates ongoing coordination and exchange of information, and in the case of complex tasks, also requires continuous adjustment in response to contingencies that arise on the spot and where delay in responses slows down the process. Mutually interdependent tasks are associated with substantial asymmetric information between those engaged in the process and external supervisors, hence the most desirable way to handle them is by employees themselves in the framework of a self-managed autonomous team.

However, the work of such teams is fraught with problems associated with providing appropriate motivation for employees to act in the organization’s best interest, not to take advantage of asymmetric information regarding the relative (hard to evaluate) individual contributions to decision-making, to sharing of information among team members, and to execution of tasks. In sum, external supervisory decision-making and monitoring are made difficult by asymmetric information and slowness of even best-intentioned information from the team to a supervisor.

¹⁹ In a very complex environment, consultation among employees may be desirable to help each other with complex issues. This may be implemented in the context of teams or other forms of employee involvement.
Decision-making is best entrusted to employees, individually, in interacting pairs and larger subsets of the team, as well as the entire team. But team work also entails a lot of exchanges among employees that are affected by asymmetric information and which require trust. The absence of trusting and trustworthiness in P1 employees thus limits the benefits and therefore reliance on teams.

However, because of agency problems associated with P1 type employees, some important decisions will be held back by the supervisor for the fear of abuse of decision-making power by employees, some supervisory monitoring will be applied in order to evaluate individual effort and reward it monetarily and with the promise of promotion, and some group incentive such as group bonus will be offered. The free rider problem will limit the size of the team that will be subject to sharing the collective reward. The difficulty to supervise a large interdependent team will further limit the size of the team.

We can summarize the organization design suitable for a complex and interdependent task environment employing a homogenous workforce consisting of P1 employees as follows. Decision-making will be shared by supervisors and employees individually and in teams. Teams will enjoy moderate autonomy and will be of moderate size. Incentives will be common, so in addition to fixed base wages there will individual pay-for-performance plans and relative individual rewards, as well as group-based rewards such as team bonuses but no profit sharing. Supervisors will monitor individual effort and performance, as well as within-group interactions and performance. In short, a profit-maximizing organization that employs a business strategy and production technology that generate substantial task complexity and interdependence and employs just selfish P1 type employees – such an organization will have a rather rich and complicated organization design, consisting of many interdependent parts that need to be finely-tuned in order to work well.

c) Organization design for a homogeneous workforce of “selfish but civil” P2 employees

Compared to P1, the P2 type employee is just as selfish but reciprocates, trusts and is trustworthy to a limited degree. These process-regarding preferences enable several differences in

20 Profit sharing at the firm level will not be offered because of the free rider (1/N) problem, with N being too large for profit sharing to constitute a viable incentive.
organization design as compared to the P1 case. Employees’ trustworthiness, albeit limited, allows a reduction – but not elimination – of the strength of the various incentives and monitoring used for P1 employees. Furthermore, efficiency wages of the Akerlof kind are now feasible because employees will reward the organization for paying an above-market wage with higher (unverifiable and not contractible) effort. However, the efficiency wage rate will have to be quite high to induce a desirable level of effort because P2 is only a 50% reciprocator, and is only somewhat trustworthy.

Thus compared to organization for P1 employees, organization design for P2 employees will be a little less tight and easier to manage because of the easing or lubrication of relationships by the (weak) social preferences of employees.

d) Organization design for a homogeneous workforce consisting of P3 “decent employees”

Unlike selfish but civil employees, “decent employees” – P3 type – care a little about their immediate coworkers, and are guided by a fairly strong sense of values. These differences change substantially the nature of the agency problem, and with it, the response to it in form of organization design.

First, the 20% other-regarding feature makes free-ridership within a team less of a problem. Second, 80% reciprocity makes efficiency wages effective, as well as profit sharing, both acting as unconditional gifts by the organization to be reciprocated by employees’ elevated performance. Third, in terms of relations among employees when there is no full observation and verifiability, 70% trusting facilitates team work, as does 50% trustworthiness. Fourth, promises made, for example, concerning the level of work effort, are more likely to be kept than in the absence of trustworthiness, which is a partial substitute for contracts and monitoring.22

Other-regarding preferences focused on co-workers may pose a problem of collusion among workers. While other-regarding is potentially very conducive to effective team work, it can result

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21 Profit sharing is of course contingent on collective performance, and may have individual incentive effects if the size of the organization is not too large. But the notion of receiving a share in the organization’s results may be presented as well as regarded by employees as gift that calls for reciprocation, above and beyond the incentive effect.

22 Ben-Ner and Putterman (forthcoming) find that there is strong substitution between trust and contracts.
in collusive action among team members against the interests of the organization. To compensate for that, team interests can be aligned with organization interests through team-based rewards such as group bonuses, both of the pay-for-performance variety and relative types. If interdependence among the activities of different teams is substantial and therefore their separate contributions cannot be precisely evaluated, profit sharing at the organization level will be instituted. Unlike the case with completely self-interested employees, the presence of strong other-regarding ameliorates not only the free-rider problem within teams, but by creating a team identity, it moves up the 1/N problem to the level of teams. This does not eliminate the problem, but the question then becomes not that of N employees in the organization, but of the number of teams in the organization.

These observations suggest that organization design for P3 employees will differ substantially from that for P1 or P2 employees. There will be considerable delegation of decision-making to teams. Teams will be largely self-managed because the low loss associated with agency problems between employees and their supervisors and among employees. There will be no individual pay-for-performance but above market (efficiency) wages complemented by group bonuses and strong firm-level profit sharing. There will be little monitoring by supervisors, and most of the monitoring within teams will be done by co-workers. Co-workers will also be responsible for peer evaluation.23

**e) Organization design for a homogeneous workforce of P4 “organization men”**

The essence of the organization man is that he carries out instructions as directed by his superiors, and poses hardly any agency problems. P4 employees populate Marschak and Radner’s (1972) organization, which they consider a team in the true sense of the word. With P4 employees there is no asymmetric information, so reasons for delegation of decision-making are few: the cost of transmitting information from employees to their supervisors quickly and effectively.24 As a result of these differences, the organization design for P4 employees will be drastically different from all others. There will be some delegation of decision-making to

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23 This is an involved argument that will be developed later.

24 Indeed, Marschak and Radner (1972) focus on the issue of delegation of decision-making in face of problems associated with transmission of information, on the assumption of differences in the ability of making good decisions, supervisors being selected into their positions for their better abilities.
individuals to deal with extreme complexity, and some delegation to teams to deal with strong interdependence, both of which require detailed local information and fast response. However, there will be less delegation of decision-making to employees than in any of the other three designs. There will be very little monitoring, and no incentives. The fixed wages will be somewhat above market to support the self-regarding preferences and to elicit reciprocity. This will be a simple organization design, as simple but different from the design for “decent employees.”

f) The cost of organization design based on incorrect employee preferences

The foregoing analysis was based on optimization of organization design relative to employee preferences. Implicit in this analysis is that applying design that is optimal for employees of type Pi when actually employees are of type Pj will yield suboptimal performance. One can write this conclusion as:

\[
\text{Perf}(OD^{Pi}_Pj) < \text{Perf}(OD^{Pi}_Pi) \text{ for all } i. \tag{1}
\]

\(\text{Perf}\) denotes performance, and \(OD^{Pi}_Pj\) means organization design optimized for Pi employees but applied to Pj employees \((i \neq j)\), and so on.

The discussion in the previous sections also suggests that the workforce composed of P4 employees – “organization men” – lends itself to the lowest cost organization design because of the near-absence of agency costs. This is followed by P3, where the process-regarding preferences of reciprocity, trusting and trustworthiness reduce the costs of agency. P2 employees are the next lowest-cost workforce to get to work effectively towards organizational goals, with P1 being last. One can write these conclusions as follows:

\[
\text{Perf}(OD^{P1}_P1) < \text{Perf}(OD^{P2}_P2) < \text{Perf}(OD^{P3}_P3) < \text{Perf}(OD^{P4}_P4) \tag{2}
\]

This suggests that if, for example, management assumes that employees are just selfish and designs the organization on the basis of this assumption but actually employees are average decent employees, then the performance of the organization will be lower than it could be had management recognized the true preferences of the workforce. This is the essence of Ghoshal’s (2005) notion that “bad management theories are destroying good management practices.”
One may further investigate the differential costs associated with other incorrect assumptions, such as applying organization design optimized for P3 to a workforce of P1, and so on. This issue will be addressed in the next subsection in the context of heterogeneous preferences.

**g) Heterogeneous preferences**

The heterogeneity of preferences detected in experiments is considerable. For example, in one dictator game experiment where subjects had an endowment of $10 which they could share in any proportion with another person, in increments of one dollar, the following distribution obtained: 17% gave $0, 8% gave $1, 4% gave $2, 17% gave $3, 0% gave $4, 50% gave $5, 4% gave $6, 0% gave $7, 0 gave $8, 0% gave $9, and 0% gave $10, for a mean of $3.42. Behavior in other experiments is similarly dispersed. A workforce that is drawn randomly from the population will be rather heterogeneous. Of course, organizations select employees relative to various criteria, including preferences. Although preferences correlate with some individual characteristics, much of the heterogeneity in behavior in experiments cannot be explained by individual demographic and other differences that can be detected through testing. Thus the extended preferences of employees cannot be identified or observed. Employees incentives to misrepresent their preferences (if they know them), so they do constitute a reliable source of information. Hence organizations will end up with a heterogeneous workforce.

Organization design for a heterogeneous workforce is a much more complicated task than that described earlier. The complication arises from the uncertainty of what types are there in the organization, because even with experience with its employees an organization will not be able to accurately separate them into types. Even if it was known that the organization’s workforce consists of say, 50% P1 employees and 50% P3 employees, or 20% P1 and 80% P3, the design problem will be complicated because the type of individual employees is not known so the design will have to account for that.

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26 Most organizations will want the same kind of employees (e.g., P4 employees), assuring that most of them will not get a proportion of them that exceeds their weight in the population.
In this subsection I consider organization design for a heterogeneous workforce. I ask what are the consequences of assuming wrongly that employees are all P1 and relying on organization design tailored for such employees, if actually (1) only 50% of employees are of P1 type, with the remaining 50% being P3, and, alternatively, (2) only 20% of employees are of P1 type, with the remaining 80% being P3. Next I evaluate the consequences of applying organization design optimized for P3 employees to the two mixes of P1 and P3 employees. Finally, I develop some ideas as to the optimal organization design for these two and other combinations of types of employees.

[to be continued]
3. Conclusions

Individuals are driven by self-interest, concern about others, and respect for values and norms. There is obvious heterogeneity in what drives individuals, with some motivated entirely by self-interest, most by a mix of self-interest and additional concerns. Organization design from the economic perspective has been driven almost solely by the self-interest consideration. In other management fields concern for others and for process has been recognized, while sometimes the role of self-interest in organizational behavior has been ignored. Even the existence of extended employee preferences – self-regarding, other-regarding and process-regarding preferences – has been acknowledged their role in organization design has not be investigated in a consistent manner. This paper aims at making a step in this direction.

[to be continued]
References


Table 1. Profiles of self-regarding, other-regarding and process-regarding preferences
(reciprocity, trusting and trustworthiness)

<table>
<thead>
<tr>
<th>Type of employee</th>
<th>Self-regarding</th>
<th>Other-regarding</th>
<th>Reciprocity</th>
<th>Trusting</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 - “just selfish”</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>P2 - “selfish but civil”</td>
<td>100%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>P3 - “decent employee”</td>
<td>80%</td>
<td>20% close coworkers, 0% all others</td>
<td>80%</td>
<td>70%</td>
<td>50%</td>
</tr>
<tr>
<td>P4 - “organization man”</td>
<td>20%</td>
<td>80% “the organization”</td>
<td>90%</td>
<td>90%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Table 2. Comparison of Organization Design Relative to Alternative Employee Preferences

*In a complex and (mutually) interdependent task environment*

<table>
<thead>
<tr>
<th>Types of employees</th>
<th>Decision-making delegation</th>
<th>Incentives</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Individuals</td>
<td>a. Individual pay-for-performance (PFP), relative pay (REL), or efficiency wage (EW)</td>
<td>a. Of effort and/or results</td>
</tr>
<tr>
<td></td>
<td>b. Teams – small, large</td>
<td>b. Group-based pay (GB) or firm profit sharing (PS)</td>
<td>b. By supervisors and/or peers</td>
</tr>
<tr>
<td>P1 (“Just selfish”)</td>
<td>a. moderate individual discretion</td>
<td>a. PFP, REL</td>
<td>a. little of effort, much of performance</td>
</tr>
<tr>
<td></td>
<td>b. partially autonomous small teams</td>
<td>b. PS</td>
<td>b. supervisors</td>
</tr>
<tr>
<td>P2 (“Selfish but civil”)</td>
<td>a. moderate individual discretion</td>
<td>a. PFP, REL</td>
<td>a. little of effort, much of performance</td>
</tr>
<tr>
<td></td>
<td>b. autonomous medium-sized teams</td>
<td>b. PS</td>
<td>b. supervisors</td>
</tr>
<tr>
<td>P3 (“Decent employee”)</td>
<td>a. moderate individual discretion</td>
<td>a. some PFP, some EW</td>
<td>a. effort</td>
</tr>
<tr>
<td></td>
<td>b. autonomous self-managed medium-sized teams</td>
<td>b. strong PS, strong GB</td>
<td>b. peers</td>
</tr>
<tr>
<td>P4 (“Organization man”)</td>
<td>a. moderate individual discretion</td>
<td>a. little EW</td>
<td>a. performance</td>
</tr>
<tr>
<td></td>
<td>b. moderately autonomous large-sized teams</td>
<td>b. (none)</td>
<td>b. supervisors</td>
</tr>
<tr>
<td>Heterogeneous workforce 50%P1-50%P3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneous workforce 20%P1-80%P3</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>