The Ethical Dimension of Industrial Mass Production: The Role of Transitive Motivation

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The ethical dimension of industrial production has been largely ignored by theorists of production. This article identifies three important features of the mass production process that are brought about by industrialization in the development of the production of goods: utility, compartmentalization, and independent external end-point. We claim that a mechanistic understanding of these features gets in the way of an ethical approach to the topic, causing important consequences in the management of employees and the entire productive process. We analyze attempts to overcome such an understanding by appeal to intrinsic and extrinsic motivation. This article concludes that this strategy is insufficient and that a comprehensive ethics of mass production only comes into view if we incorporate transitive motivation into the analysis.

Introduction

Ronald Coase stated in his famous treatise that a firm “consists of the system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur,” and its transaction costs are more effectively governed within firms than markets. Therefore, corporations act by means of rational calculation of means and ends, and executives make decisions according to that rationalization. If ethics is understood as the moral principles that govern a person’s behavior or the conducting of an activity, it is not surprising that the debate about whether companies are moral agents has been present in academic journals over the past decades.
The moral nature of the firm has been approached from many different points of view: virtue ethics, virtue ethics and the contractualist theory, ethics of care, and the company as a community of persons. However, the main proponent for attributing moral agency to corporations is perhaps French, based on the concept of intentionality because every corporation has an internal decision structure a moral personhood can be attributed to corporations. Collier and Moore went further with this idea.

Despite the increasing presence of the moral dimension in the consideration of the nature of the firm, the general treatment of the mass-production process so far has been an amoral approach. On referring to industrial activity, production connects itself with the manufacturing of objects in a series, usually by mechanical means. The tendency to consider this type of production as an objective, cold, and mechanical process, inaccessible to the goals and values of the business and the alignment of common interests has been a topic present in the history of business thought. The producer—the worker—has been understood as an agent exclusively in service to the process, and, therefore, production has become a matter of efficiency and is ethically neutral, or at least independent, and acquires an objective and independent character. Because production has no manufacturing of character and adds nothing to the producer himself beyond the effort and sacrifices, it would have a moral exemption, as Crespo summarizes well.

However, we consider that this assumption is not a real approach at all. Production is a human activity as is any other phase in business, and consequently human dimensions—and the moral one among them—are involved in that process. Therefore, the ethical dimension of this activity should be considered.

The introduction of extrinsic and intrinsic motivation in corporate behavior has led to attempts to bridge the gap between the technical and the ethical sides of the process. Moreover, we argue that these motivations have not been sufficient, and we need transitive motivations to completely overcome this limited inheritance. We label this motivation, following the terminology used by Melé, as transitive motivation that moves from self-perspective to the other’s perspective. This kind of motivation is the same motivation referred by Pérez-López when he claimed that human beings have both kinds of motivations: those of self-interest (extrinsic and intrinsic) and those of others-interest (transcendent). This will allow us to transcend the individual domain and to consider the impact that our actions have on others.

Our purpose is to identify three aspects of production that understood in a mechanistic way have prevented the ethical consideration of mass production in order to show how introducing transitive motivation can give a comprehensive ethical dimension to production.
We will develop this work as follows: We begin with a description of the classical view of industrial production in line with three basic characteristics: utility, compartmentalization, and independent external end-point—basically caused by industrialization in the development of the production of goods. Then, we briefly review the extrinsic, intrinsic, and transitive motivation concluding that although intrinsic motivation eliminates many of the limitations imposed when utility and compartmentalization are seen in a mechanistic way, the binomial exterior/interior remains unframed. Without this connection, we will not have a true ethical perspective of mass production. Finally, we show how the transitive motivation overcomes this last obstacle and gives a complete ethical dimension to industrial production.

Description of the Classical Vision of the Productive Process

By production, we mean “the attempt to create a product which is more highly valued than the original input elements.” In order to achieve output with lower input of power, time, and money, individual work as was traditional in the craftsmen trades changed at an early stage to production based on the division of labor, and this later on led to the development of assembly lines and mass production. Consequently, production was conceived of as a logistic process comprising the entire activity that results in providing the right product, at the right time, in the right place, with the right quantity, for the right customer, at the right price.

Production is essentially a useful activity. It is oriented toward making a product that responds to what the market demands with levels of quality and at a reasonable cost. Therefore, one of the most important notes of production is efficiency and effectiveness measured by extrinsic results—the difference between what companies receive for providing a good or a service and the cost of resources used in its production. The entire production line, from raw material to end product, is carefully designed to allow each single work process to make the most effective contribution possible.

According to this, a first characteristic of the production is that it be useful. The utility of production can be external with its beneficiaries being the consumers of the goods provided, or it can be internal with its beneficiaries being the company through revenues generated by the sale. This income is distributed mainly in payments to suppliers and profit to the owners. Among the suppliers are the employees who provide primarily time and effort—work—and receive in exchange a salary that compensates them. Therefore, production should be
directed at achieving results that benefit all parties involved in the firm—all the stakeholders.\textsuperscript{17}

Production is a temporal and spatial process that concludes with a particular outcome. The division and specialization of labor has split the process into stages that typically become compartmentalized with the risk of not having communication or interaction among them. Because employees are assigned to the different phases, they can be isolated from both the whole production process and the final product brought to market.

In the preindustrial stage of production, the producer (or rather the craftsman) was involved in all phases because it was he who acquired the necessary materials, performed the manual labor to create the product, and finally sold the finished piece of work.\textsuperscript{18} Industrialization led to a design of the productive process as a succession of simple tasks consisting sometimes in the repetition of mechanical movements. This division of labor can degenerate into a radical compartmentalization in assembly lines that limits, in most cases, the employee’s task to a mere technical routine. Training periods can become shorter because they find easier and readily available methods of performing their own particular work, more people are able to carry out the work, and wages can be lowered. The employee must follow some operational protocols and focus on his isolated contribution to the process, regardless of what happens earlier or later by “bending over his position.”\textsuperscript{19} The worker remains at his place of work while the work pieces travel past him. As stated by Samaranch, in productive activities ontic-axiological weight is in the product, not in the process that is subsidiary.\textsuperscript{20} Productive activity is not usually performed for reasons of virtue or beauty but rather is focused directly on the result.\textsuperscript{21}

Finally, the product has to reach the market. To make this possible, the product has to be a separate and distinct reality of the people who produce it—something external. The final product is an entity completely independent.

We think these three traits of production, utility, compartmentalization, and independent external end-point, define well the concept of mass production conceived in business theory at its inception. When these characteristics are understood in a mechanistic way, the entire process can be considered as a process that is almost servile, alien to subjectivity and the virtue of the agent and alien, therefore, to the human and ethical dimensions. This development found a climax in automated production where man’s involvement in the course of the production process has largely been eliminated.\textsuperscript{22}

The introduction of human motivation in entrepreneurial thinking, distinguishing between extrinsic and intrinsic motivation has greatly helped to overcome some of the limitations regarding the mechanistic understanding of the concept.
of production. As Ryan and Deci explained, “intrinsic motivation refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation refers to doing something because it leads to a separable outcome.” The latter motives are directly related to some external compensation: money, recognition, material rewards or other benefits, technical training, power, prestige, and so forth. The former are related to internal reasons as challenges, personal enrichment, having an enjoyable job, occupying a prestigious post within a firm, liking the quality of human relationships, and so forth. The most genuine intrinsic motivation is the personal improvement resulting from the action.

However, as noted, we argue that these two kinds of motivation are not sufficient to completely transcend the limitations. Transitive motivations are needed to develop an ethical understanding of the mass production process. This kind of motivation is related to the consequences of our actions on other people, and the action is moved by a sense of service and cooperation, which leads to attitudes of identification, commitment and loyalty to the mission, as well as to values or goals of the firm. These motives are derived from discovering that serving or cooperating with the company is something worthy for everybody; it is a common good for the firm and even for society at large.

The Interaction between Production and Extrinsic and Intrinsic Motivation

In the mid-nineteenth and early twentieth centuries, utility and compartmentalization were the dominant features of the mass-productive process. The production was conceived of as an automated execution oriented toward a useful outcome. Therefore, the only way to improve it would be the implementation of measures to adapt the employees to the mechanical rhythms of the machines, which was ultimately responsible for the creation of wealth. This logic was captured in the first models of productive organization that was based on discipline, security, and order to achieve higher productive efficiency.

This view of production governed by technology and technique was also prevalent in the ideas of F. W. Taylor. Taylor emphasizes that production should be organized in a scientific way by managers: first, they have to break the process into elementary tasks by specializing workers in only one task and isolating them from the work of the others, thus designing a sort of machine to achieve the maximum productive performance with the minimum effort. The resulting motivation was purely extrinsic: a greater salary and a generic improvement in labor conditions. Most companies operated on a strictly economic level, which manifested itself in a strategic management, that was quasi-scientific.
With J. R. Commons at the forefront, the institutional economics began to introduce intrinsic motivation by considering business as an institution destined to store and to reproduce habits and routines—knowledge—necessary for the productive activity. Therefore no company could be reduced to a function of production nor production to maximizing behavior that departs from prices set by the market.\textsuperscript{30} Between the production design and its implementation, a middle ground exists where the worker is involved; in which their motivation and social skills (not just the technological ones) play an important role. Employee’s intrinsic motivation, that is, the acquisition of internal learning, is very important in this process. This learning showed the relevance of the internal utility of production, not only for employees but also for the company, which becomes an organizational entity with its own life and memory in which the learning process is decisive.\textsuperscript{31}

Parallel to these ideas, E. Mayo, based on the Hawthorne experiments, highlighted that some psychological motives—need of recognition and need of belonging to a certain group—were more important to the productive agents than just the economic and the physiological motives. He suggested assigning to the workers areas of decision in the production process to let them feel recognized, thus keeping their motivation high. The result would be better efficiency, provided managers were able to channel every will in a common goal.\textsuperscript{32} Although these ideas established the bases of corporate culture and the theory of cooperation, the latent positivist and mechanistic prejudice caused them to be relegated to mere external aspects. In the end, Mayo introduced psychological mechanisms into Taylor’s scientific organization that, properly handled, would serve to better adapt employees to the technical conditions of production and thereby forgetting their human side. These approaches tried to combine productivity and satisfaction, extrinsic and intrinsic motivation, but they did so incompletely.

The work of E. Penrose goes further into these ideas. According to this author, the amount of learning that arose from the interaction between man and the business became the driver of growth. This produced not only profits but also the improvement of the capacity to do certain activities better than other people, therefore consolidating a comparative advantage.\textsuperscript{33}

Finally, with these authors, the external utility of production is bound together with a deep meaning of internal utility, understood as the ability of work to enrich the employees and the managers through practical knowledge. The company enters the field of internal improvement, the intrinsic motivations of employees, who not only seek a salary but also the acquisition of skills and know-how. This allows utility not only to be projected outward but more importantly to be retained in the company itself. We have transcended into a level where managers’ interests are not just what the employee does but how she can make it better
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while improving herself. Therefore, employees can make their work an enriching experience, which also provides a venue to save the negative connotation of compartmentalization of the production process by allowing them to transcend their particular task while perceiving themselves as part of the entire process and even of the final outcome. This completely integrates the employee into the whole life of the company.

The business models that consequently emerged helped to consolidate the idea that the company is a living organism, with a process of growth and learning. From this perspective, the business is seen as an ensemble of people who interact in a strategic management model, to achieve a common goal. This is no longer just the maximization of profit or a logical and rational design under the assumption of perfect information but rather the search for a specific singularity that is achieved through action and learning. It is not independent of the quality of its institution or of the people who compose it. It is also not independent of the development of their skills and resources.

The Transitive Motivations

The introduction of learning in the production process has allowed a better understanding of two of the factors that define the concept of production. On the one hand, the utility of the product is not only external, referred to the market but is also internal, present throughout the process of production by means of personal learning (the professional development and refinement of technical skills and operating habits and human virtues that go beyond mere technical aspects), and of organizational learning (the continuous improvement of the know-how of the company). Work becomes a domain of personal improvement, and employees can simultaneously reach extrinsic and intrinsic motivations.

On the other hand, insofar as this learning is integrated into the dynamic development of business, the negative consequence of the division of labor as well as the radical compartmentalization of the productive process is no longer conceived of as a succession of isolated units. The employee can take part in the global idea of the product, to be integrated into the living organism, which the business becomes. While they are in their workplace, they can work with the overall vision and motivation in their minds.

The transformation of these two characteristics by connecting the intrinsic dimension of the employee with the company is an important and necessary step to close the gap between ethics and mass production. However, in order to develop a comprehensive ethics we must go beyond this. What really makes an organization human is the association with people. We need to surpass the
connection of person-to-thing and person-to-knowledge-to-group, thus reaching the connection of person-to-person.

This last bridge is built on connecting the third characteristic of production—the independent external end-point—with transitive motivations. The learning process at work entails an internal enrichment for the employee and therefore an intrinsic motivation, but it is still self-centered. However, the work can make the individual go out of himself and look at others, entering into the domain of transitive motivation. These motivations are related with serving or cooperating with others. This happens when the employee desires to bring about a certain good outcome not in herself but in the other: either the client or the rest of the employees.

If the employee seeks to achieve, together with extrinsic motivation (i.e., an external reward for his work such as salary, position, power) the intrinsic motivation (i.e., learning, virtues) and transitive motivation (service, cooperation, support, and the like), then the employee creates a richer environment that overcomes the last characteristic of the production we have pointed out: the independent external end-point. The product is no longer something external or alien to him. It has now become the channel through which she can cooperate with others and serve them. We can work thinking about how to satisfy others, how to give them a better product or a service just for the sake of them, precisely because it is good for them, not for myself, not because it satisfies or pleases me, but for him or her.\(^{37}\)

This means working with a goal that includes other people’s interests or well-being. Thus, the action takes the character of a gift, of gratitude, that expresses the highest degree of transcendence of the human being. The human being is a social being by nature; he needs to enter into relations with others, to share, to give, to love and to be loved, and if economic development wants to be authentically human, it should give space to the principle of gratuity as an expression of fraternity.\(^{38}\)
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Table 1: The Human Motivation

<table>
<thead>
<tr>
<th>Type of Motivation</th>
<th>Extrinsic</th>
<th>Intrinsic</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction of the motivation from Agent (A)</td>
<td>A ←</td>
<td>A ↫</td>
<td>A →</td>
</tr>
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</table>

The arrows in table 1 graphically illustrate the external origin of the motivation. Because extrinsic motivation is defined as factors outside of the agent that explain why he or she acts, the arrow comes from outside. The intrinsic motivation refers to when people are internally motivated to do something because they think what they are learning is significant or important or because it brings them pleasure or satisfaction; therefore, the arrow goes from inside to inside. The third type of motivation, the transitive, points to outside of the agent.

Consider, for example, a manager implementing a new safety program for her employees in a factory. The motives of her action can be related to extrinsic motives, such as favorable monetary compensation, achieving social prestige and attaining the moral reputation of being a good person. In addition, there may also be intrinsic motives such as learning a new technique; having a personal satisfaction for the success of this implementation; striving to be a good person who fulfills her duties with integrity; and/or trying to be honest, industrious, and generous. At this point employees have transcended to the level of intrinsic motivation. Furthermore, this manager may have other motives such as providing employees a safer workplace without a direct link with an increase in productivity. The manager may also be giving her employees care and affection while trying to improve their welfare only for the sake of themselves as a kind of human love. We have now entered the realm of transitive motivation, in which the exterior and the interior dimensions come together, that is to say, through that service, they can integrate the good of others into their own good. In this action, different motives may vary in presence and intensity precisely because human beings are free to decide the reasons for their choices, which broaden the horizon of their motivations.

When this service attitude becomes global, the transitive motivation takes shape in human solidarity or universal love. Of course this capacity is not based on the work but on the extraordinary richness of the human being that can recognize the good for the others and integrate it into his or her own good, even not...
conceiving this own good without a high dose of the good for others, ultimately, leading to the common good.

**Conclusion**

Throughout this article, we have identified three important characteristics of production (utility, compartmentalization, and the independent external end-point) that, being understood in a mechanistic way, have impeded an ethical approach of this field of business. Utility has usually been considered only in its external side, as the interest that production contributes to the business, and becomes the profit for the businesspersons and the salary for the employees. Compartmentalization has been understood as the fragmentation of the process of production into units in such a way that the employee remains linked only to a single segment at a time, being alienated from the process as a whole and from the final result. This disconnection is so powerful that it causes the last characteristic, the independent external end-point, to remain like something absolutely alien and strange to the employee. This is the vision that, in our opinion, business theory inherited in its initial stage.

Subsequently, we have concisely revised how the introduction of intrinsic and extrinsic motivation has led to attempts to overcome the limitations imposed by the inadequate vision of these three features. At the beginning of the twentieth century, and because of a vision dominated by the external utility of production and extrinsic motivations, the first mechanistic model of production was born. Gradually, psychological considerations were introduced, which opened the door to internal learning and intrinsic motivation, as well as fostering the development of skills and habits in the employee. This expanded the utility beyond mere monetary compensation, entering into the internal domain. This enrichment does not stop at the employee but extends to the entire business conceived of as a living organism with a common goal that integrates all the phases of the company into a single dynamic knowledge that overcomes the isolated compartmentalization mentioned above.

In spite of having freed the ideas of utility and compartmentalization of mechanistic roots and having inserted them into an ethical concept, the exterior-interior binomial remains alienated, and, without moving beyond this, we will not reach a comprehensive ethical perspective of production.

To resolve this obstacle, we conclude that a way to integrate the external character of production into an ethical model is to focus it under transitive motivation, through which the employee includes other people’s interests or well-being into
her own good. The work is understood as a service, as a sort of gift, of gratitude, that expresses the highest degree of transcendence of the human being.

Notes


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38. Benedict XVI, encyclical letter *Caritas in Veritate* (June 29, 2009), 34 and 53.