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

Ignacio Ferrero
University of Navarra

Reyes Calderón
University of Navarra
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ABSTRACT

The ethical dimension of industrial production has been largely neglected by theorists of production. This article identifies three important features of the production process, i.e. utility, compartmentalization, and independent external end-point; brought about by industrialization in the development of the production of goods. We claim that a mechanistic understanding of these features gets in the way of an ethical approach to the topic. 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 production only comes into view if we incorporate transitive motivation into the analysis.

Ignacio Ferrero
School of Economics and Business Administration
University of Navarra
jiferrero@unav.es

Reyes Calderón
School of Economics and Business Administration
University of Navarra
rcalderon@unav.es
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Autores
Ignacio Ferrero. Departamento de Empresa. Universidad de Navarra. jiferrero@unav.es
Reyes Calderón. Departamento de Empresa. Universidad de Navarra. rcalderon@unav.es

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The ethical dimension of industrial production has been largely neglected by theorists of production. This article identifies three important features of the production process, i.e. utility, compartmentalization, and independent external end-point; brought about by industrialization in the development of the production of goods. We claim that a mechanistic understanding of these features gets in the way of an ethical approach to the topic. 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 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” (Coase 1937) and its transaction costs are more effectively governed within firms than markets (Zenger et al. 2011). Therefore, corporations act by means of rational calculation of means and ends (Schudt 2000), 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 (Mahoney 1998; Moore 1999, 2005; Moore and Beadle 2006; Schudt 2000; Solomon 2003); virtue ethics and the contractualist theory (Heugens, Kaptein and van Oosterhout 2008); ethics of care (Dobson and White 1995); the company as a community of persons (Mele 2003). However, the main proponent for attributing moral agency to corporations is perhaps French (1979, 1984 and 1995) based on the concept of intentionality: since every corporation has an internal decision structure a moral personhood can be attributed to corporations (1979). Collier (1995) and Moore (1999) went further with this idea.

Despite this increasing presence, the general treatment of production process so far has been rather an amoral approach. Upon referring to industrial activity, production connects itself with the manufacturing of objects in a series, usually by mechanical means. The tendency to consider production as an objective, cold, and mechanical process, inaccessible to the goals and values of the business and the alignment of common interests (Picavet 2009) has been a topic ever-present in the history of business thought. The producer has been understood as an agent exclusively in service of the process, and therefore production has become a matter of efficiency, ethically neutral, or at least independent, acquiring an objective and independent character (Le Menester & Van Wassehove 2004; Brocklesvy 2009). Since in the production there isn’t manufacturing of the character (Sherman 1989), and it adds nothing to the performer himself, rather than the effort and sacrifices (Utz 1998), “production would have a moral exemption”, as Crespo summarized well (1997).

However, we consider that this assumption is not a real approach at all. Production is a human activity as any other phase in business, and consequently human decisions 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 (Deci & Ryan 1985) has led to attempts to bridge the gap between the technical and the ethical sides of the productive process. Moreover we argue that these motivations haven’t been
sufficient to overcome this limited inheritance. Our purpose is to identify three aspects of production that are understood in a mechanistic way, which have prevented its ethical consideration. This shows how the introduction of extrinsic, intrinsic and moreover 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, i.e. 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 production. Finally, we show how the transitive motivation overcomes this last obstacle, giving 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 inputs elements” (Frisch 1963, 8). 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 a production based on the division of labor, and this later on leaded to the development of assembly lines and mass production (Peters 1994). Consequently, production was conceived as a logistic process comprising the entire activity resulting in providing the right product, at the right time, in the right place and quantity, for the right customer, at the right price (Coyle et al. 1996).

The production is an essentially 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, the most important note of the production is the efficiency or effectiveness, measured by extrinsic results: the difference between what companies receive for providing a good or a service to consumers 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 works process to make the most effective contribution possible.

Therefore, a first characteristic of the production is that it be useful. The utility of production has diverse beneficiaries: consumers when they use the goods provided, and 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 their opportunity cost. Therefore, production should be directed to achieving results that benefit all parties involved in the firm.

On the other hand, production is a temporal and spatial process that concludes with a particular outcome. The division and specialization of labor has split the process in stages, which typically become compartmentalized, with no communication or interaction between them. Employees are assigned to the different phases, being isolated from both the whole production process and the final product brought to market.

In pre-industrial stage of production, the producer, or rather the craftsman was involved in all phases, since it was he who acquired the necessary materials, performed manually to create the product, and finally sold the finished piece of work (Peters 1994). Now, industrialization led to a compartmentalization in assembly lines, and the employee’s task is limited in most cases to a mere technical routine. Training periods become shorter because they find out easier and readier methods of performing their own particular work (Smith 1963), and 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, "bending over his position" (Durkheim 1895). Workers remain at his place of work whilst the work pieces travel past him. As stated by Samaranch (1991), in productive activities ontic-axiological weight is in the product, not in the process which is subsidiary.
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; there must be a clear separation between the product and the producer. Since the productive process has a technical nature, which determines how employees, machines and materials can usefully relate to one another during each phase of the production process, it can be understood as something completely external to the workers, and the final product completely independent. Productive activity is not performed for reasons of virtue or beauty, but rather is focused directly on the result (Engberg-Pedersen 1986). Consequently, its evaluation will be purely technical and workers can easily be exchanged.

We think these three traits of the production: utility, compartmentalization, and independent external end-point, define well the concept of production conceived in business theory at its inception. It has been considered, up until now, as a process almost servile, alien to subjectivity and the virtue of the agent, and alien, therefore, to the human and ethical dimensions. This development has found a climax in automated production where man’s involvement in the course of the production process has largely been eliminated (Peters 1994).

The introduction of human motivation in entrepreneurial thinking, distinguishes between extrinsic and intrinsic motivation and this has greatly helped to overcome some of the limitations regarding this 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” (2000). The latter motives are directly related to some external compensation: salaries, material rewards or other benefits, technical training received, power, prestige... While the former are related to internal reasons as having an enjoyable job, such as being proud of belonging to a firm with a great reputation, occupying a prestigious post within the firm, liking the quality of human relations and so on (Mele 2003). The most genuine intrinsic motivation is the personal improvement resulting from the action (Falgueras 2000).

However, as noted, we argue these two kinds of motivation are not sufficient to completely transcend these limitations. Transitive motivations are needed to inculcate
production with an ethical dimension. This kind of motivation is related with the consequences of our actions on other people, and the action is moved by a sense of service and cooperation. This leads to attitudes of identification, commitment and loyalty to the mission, as well 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 (Mele 2003).

THE INTERACTION BETWEEN PRODUCTION AND EXTRINSIC AND INTRINSIC MOTIVATION

In the mid nineteenth century, production was conceived as an automated execution oriented toward a useful outcome. Therefore, the only way to improve it would be in the implementation of measures to adapt the employees to the mechanical rhythms of the machines, ultimately responsible for the creation of wealth. This logic was captured in the first models of productive organization, based on utility and compartmentalization, discipline, security and order to achieve higher productive efficiency (Ure 1835; Owen 1825; Mill 1848).

This view of production governed by technology and technique was prevalent as we entered the 20th century in the ideas of F.W. Taylor (1911). Taylor emphasizes that production should be organized in a scientific way by managers: first, they have to break the process into elementary tasks, specializing each worker in one task and isolating them from the work of the others, designing a sort of machine to achieve the maximum productive performance with the minimum effort. The motivation was purely extrinsic: a greater salary and a generic improvement in labor conditions. Companies operated on a strictly economic level, which manifested itself in a strategic management, which was quasi scientific. The company was understood as a contractual association in search of maximizing profits. Utility and compartmentalization were the dominant features of the productive process at that time.

With J. R. Commons at the forefront, the institutional economics began to introduce intrinsic motivation, 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 (Martínez-Echevarría 2005). Between the production design and its implementation, a middle ground exists where the worker is involved; and in which their motivation and social skills, and not just the technological ones, play an important role. Employee's intrinsic motivation, i.e. the acquisition of internal learning, is very important in this process. This learning gives an internal meaning to the characteristic of utility.

In line with this argument, P. Selznick (1948) expanded the vision of the business into an entity with its own and exclusive configuration. The company, in his view, is constantly submitted to a learning process, as a consequence of the contrast between formal designs and problems planted by daily and immediate reality. Efficiency cannot stand as absolute criterion of an organization. In this sense, the company abandons its role as a regulator and holder of an optimum formula for production and instead becomes an organizational entity with its own life and memory in which the learning process is decisive overcoming somehow the compartmentalization of the productive process.

In parallel to these ideas, E. Mayo (1933), based on the Hawthorne experiments (conducted between 1927 and 1932), highlighted that some psychological motives –need of recognition- as well as social –need of pertaining to a certain group- were more important to the productive agents than only the economic and the physiological. He suggested assigning the workers areas of decision in the production process to let them feel recognized, thus keeping their motivation high. The result would be a better efficiency, provided managers were able to channel every will in a common goal. 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 in Taylor’s scientific organization that, properly handled, would serve to better adapt employees to the technical conditions of production, forgetting their human side. These approaches tried to combine productivity and satisfaction, extrinsic and intrinsic motivation, but they did it incompletely. They understood motivation as just another resource to achieve maximum productivity from the employee, becoming a *taylorism* with a face. The underlying approach is to foster
motivation in people to do what they have to do, but only in order to increase efficacy. Therefore, in the above model, extrinsic motivation is still more predominant than intrinsic motivation.

Ch. Barnard in 1938 collects this line of thought giving a step forward when he introduced a concept that will have a notable importance: the efficiency of the business. He based the success of organizations not exclusively on their pursuit of efficacy, i.e. to reach the maximum possible profit and on the part of the employees the highest salary, but also the efficiency, for which the satisfaction of the intrinsic motivations of the workers is reached. This efficiency is measured as the ability of a business to facilitate the acquisition by employees of technical skills and operational habits that enable them to get a better product in the future, to resolve more complicated problems or more effectively, making them more aware of the needs of the business (Argandoña 2008).

The work of E. Penrose (1952) goes further into these ideas. According to this author, the learning arose from the interaction between man and the business became the driver of growth. This will produce not only profits but also the improvement of the capacity to do certain activities better than other people, consolidating thus a comparative advantage. Business is not a simple maximizing function but an organization with the ability to create and make use of productive resources. It does not base its growth on size but rather on the qualities that essentially distinguish it from the others.

Finally, with these authors, the notion of production as something exclusively useful binds with the ability of work to enrich the employees and the managers through practical knowledge simultaneously. The company has entered 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. The utility of production for them is no longer only the wage. We have transcended into a level where managers’ interests are not just what the worker does but how he or she can make it better while improving him or herself. Therefore, employees can make their work an enriching experience, which provides a venue to save the negative connotation of compartmentalization of the production
process, allowing them to transcend their particular task 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 (Chandler 1962; Simon 1962; Cyert and March 1963) helped to consolidate the idea that the company is a living organism, with a process of growth and learning. In the field of production, this becomes a channel through which together with the product utility is provided to the employee and the company itself. Furthermore, the connection of the managers with the workers improves the complex human structure of the business and is in itself a fuel for growth. The business goal integrates all the objectives of its members.

From this perspective, the business is seen as an ensemble of people who interact in a strategic management model (Porter 1985), 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 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 that compose it. It is also not independent of the development of their skills and resources (Foss 1993).

**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 tied exclusively to its punctual presence in the market and later consumption. Rather, this utility is 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 skills), and of organizational learning (the continuous improvement of the know-how of the company). The work becomes a domain of personal improvement, and employees can reach simultaneously extrinsic and intrinsic motivations. On the other hand, insofar as this learning is integrated into the dynamic development of business, the compartmentalization of the productive process, conceived as a succession of independent units, is reduced and
eliminated completely. The employee can participate in the global idea of the product, to form part of and be integrated into the living organism in which the business becomes. While they are in their workplace, they can work with the overall vision and motivation in their minds. They undoubtedly will participate and form part of the business’s know-how as a whole.

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 production. However, we think to develop a comprehensive ethics we must go beyond this. We must make employees go out of themselves and make connections with others. What really makes human an organization is the association with people. We need to surpass the connection of person-to-thing and person-to-knowledge-to-group, reaching the connection of person-to-person.

This last bridge is built upon connecting the third characteristic of production -the independent external end-point- with transitive motivations. As we mentioned above, these motivations are related with serving or cooperating with others, with the desire to bring about a certain good outcome not in the agent who acts, but in the other (Argandoña 2011). The human being is a social being by nature; he needs to enter into relations with others, to share, to love and to be loved. 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 him and look at others, entering into the domain of transitive motivation. This happens when the employee takes into account the effect his or her actions are likely to have on others: either the client or the rest of the other 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 the transitive motivation, such as service, cooperation, support and the like ... creates a richer environment, overcoming 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 he 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 (Argandoña 2011).

This means working with a goal which 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 was made to give, and if economic development wants to be authentically human, it should give space to the principle of gratuity as an expression of fraternity (Benedict XVI 2009, n. 34 and 53).

Consider, for example, a manager implementing a new safety program for his employees in a factory. The motives of his/her action can be related to extrinsic motives, such as favorable monetary compensation, achieving social prestige and attaining moral reputation of being a good person (at this stage we are considering only the utility of the work and the extrinsic motivation). In addition there may be also 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 his/her duties with integrity; trying to be honest, industrious, and generous. At this point employees have transcended to the level of intrinsic motivation.

Furthermore, it is also possible that this manager might have other motives such as providing employees a safer work-place without a direct link with an increase in productivity. The manager may also be giving his 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 his 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 attitude becomes global, the transitive motivation takes shape into 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 his own good without a high dose of the good for others, ultimately, leading to the common good.

CONCLUSIONS

Throughout this work, we have identified three important characteristics of production (utility, compartmentalization and the independent external end-point), that being understood in a mechanistic way has impeded an ethical approach of this field of business. Utility has been considered as that interest which production contributes to the business, and becomes the profit for the businessmen 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, which indicates that the product remains as if 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 these three features. At the beginning of the twentieth century, and as a result of a vision dominated by the utility of production and extrinsic motivations, the first mechanistic model of production (Taylor) was born. Gradually, psychological considerations were introduced, which opened the door to internal learning (Mayo) and intrinsic motivation (Barnard and Penrose), as well as fostering the development of skills and habits in the employee. This expanded the utility beyond mere monetary compensation. This enrichment does not stop at the employee but extends to the entire business that is conceived as a living organism (Chandler, Simon, Cyert and March) with a common goal that integrates all the phases of the company into a single dynamic knowledge overcoming the compartmentalization mentioned above.
In spite of having freed the ideas of utility and compartmentalization of its mechanistic roots and having inserted them into an ethical concept, the exterior/interior binominal still remains alienated, and without this, we will not reach a comprehensive ethical perspective of production.

To resolve this obstacle, we conclude that the way to integrate the external character of production into an ethical model is to focus it under the transitive motivation, through which the employee includes other people’s interests or well-being into his 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.

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