

## **Innovation: An Anthropological View**

### **Innovation and Economic Theory**

In its etymology, the term innovation comes from the Latin *innovare*, meaning "to change or alter something by introducing something new."<sup>1</sup> Strictly speaking, only freedom can introduce novelty in the world, as a result of human activity that gives it meaning and value. In denying this reality, by reducing innovation to pure externality, talking about innovation becomes meaningless and a phrase of biblical origin rings all too true: "*nihil novum sub sole*."

From the point of view of the economy, in both a broad and strict sense, innovation is considered anything that increases existing value in society, i.e., that improves the welfare of those who live in it. Although modern efforts to improve overall outcomes are not negligible, the fact that reason has gradually been moved from the action to the product is problematic. As a result, modern economics has promoted the idea that, within a business enterprise, innovation is anything that contributes to an increase in profits, the result *per excellence*.<sup>2</sup> The problem seems to be then whether an increase in a company's profit is really a sign that it has also made a positive contribution to the value of society as a whole. This is increasingly difficult to discern because value is influenced by so many complex causes, but, in any case, it is not clear that innovation and the creation of value are synonymous.

Modern economic theories have not really confronted the problem of innovation and have instead simply assumed the existence of "natural laws" that guarantee human progress without having to worry about innovation's meaning. Standard business practice advises us to follow "natural laws" akin to a "neutral" rationality that, through "competition," foster a kind of adaptive behavior, which can be summarized by the slogan "innovate or die." In this context, only certain changes to the way of doing things or in the "division of labor" succeed; namely, they must first entail a steady increase in a business's economic value and, through it, in society as a whole. Clearly, the relationship between value creation for companies and creating value for society is more complex than this naturalistic explanation assumes.

In the so-called Walrasian models, innovation has a limit: the state of equilibrium. By assuming that innovative capacity is exhaustible, the economy can be considered a closed or conservative system that tends toward a state of stable equilibrium. From this perspective, innovation would stabilize the economy. The facts show that things are not so simple, that innovation can act as a stabilizer or destabilizer, impeding the economy from reaching any kind of predictable equilibrium.

In fact, all innovation involves a change in the structure of the multiple and

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<sup>1</sup>The Oxford English Dictionary conserves its etymological origins in its definition of "to innovate:" "Make changes in something established, especially by introducing new methods, ideas or products."

<sup>2</sup> It is striking how most influential business gurus discuss this subject from this perspective. See for example, Drucker, Peter (1986); Peters, Tom (1997); Kotler, Philip (2003) o Prahalad, C. (2009).

complex relationships that exist within society, starting with how a society designates property to the way in which work is undertaken. The Walrasian model, in assuming that there is a final structure of equilibrium, denies the possibility that innovation opens new, unexpected and unpredictable roads, thus escaping any possibility of calculative control. In turn, it also denies the existence of a future that, by definition, is unpredictable.

By omitting innovation— i.e. unpredictability—economics can be subjected to methods that traditionally pertain to the natural sciences, making the economic system “natural.” Thus, the economy’s development conforms to a logical or mathematical movement, which leads deterministically toward equilibrium, toward supposedly optimal social welfare. That is why in Walrasian closed models, which do not admit the possibility of innovation, all change is reduced to something virtual, to a deterministic calculation of the consequences implicit in the starting conditions: maximum value, which is assumed as a constant and a given from the beginning.

At its core, the origin of this rationalist methodological attitude contains a Platonic epistemology whereby only that which is transparent to human reason is considered real, in the sense that it is expressible in mathematical terms. Naturally, this attitude implies a considerable narrowing of man's ability to deal with uncertainty or innovation, which, paradoxically, lies beyond the dynamics of natural processes because it comes from human action itself. If reason cannot go beyond itself, if it can only handle representations of reality, it cannot accept any genuine increase in knowledge, which is what ultimately makes innovation possible.

Aware of this dramatic limitation and inspired by Darwinian evolutionism, Alfred Marshall proposed a way out that allowed for the creation of value within economic theory. This attempt, however, fell short and seemingly attempted to square a circle. Marshall considered the economy as a process of steady and constant growth of total value so that it never ceased to be in equilibrium. This approach did not substantially change the idea of inevitable and deterministic progress, but it made calculation much more difficult.

Attempting to find guidance in evolution through biological processes does not help explain the basic fact of human action that, for better or for worse, is constituted by openness to the unexpected and to novelty. The radical difference between nature and history— or between physics and economics— lies in the fact that, in the former, value creation is nonexistent because value depends on human judgment and freedom. In nature everything that happens is causal and is characterized by an inexorable development of that which is given from the beginning. In history, or more specifically in human action, there is continual openness to the unexpected, a consequence of human freedom that poses dilemmas that are impossible to delineate or determine from the beginning.<sup>3</sup>

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<sup>3</sup>A misunderstanding of human freedom has led many to consider innovation as an individualistic phenomenon. This position is evident in the historicist currents of Germanic origin, and in business discourse. A quote from Peter Drucker (1986) exemplifies this: “Innovation is the specific tool of innovative entrepreneurs”.

At the heart of nature everything evolves according to fixed, predictable dynamics, regulated by a homeostatic equilibrium process. By contrast, at the heart of history there exists a great chain of processes, activities and artifacts that are not always given, making possible different ways of understanding the world and human life. This chain does not stop changing in unpredictable ways as a result men's free action.

Thus, while nature continues on a path that is set from the beginning and that develops without effort or resistance, history involves the work of man, the collaboration of free human action, leading to the continuous creation and destruction of value. For example, when, for whatever reason, a civilization loses its ability to innovate, maintain, and improve upon the meaning of that which has already been achieved it breaks down and eventually disappears.

For postmodern economists like Keynes or Schumpeter, the economy is not a closed, conservative system that tends necessarily toward equilibrium and optimal social welfare. The economy may get better or worse and always does so unpredictably, so that not only do they recognize the importance of innovation, but they also consider it essential to explain the unpredictable nature of businesses and the economy as a whole.

For Keynes, investment, which he thinks of as another way of understanding innovation, is inseparable from uncertainty and risk, so that it becomes inexplicable from the point of view of an enlightened "rationality," such as that of Walras or Marshall. Keynes understood investment behavior by appealing to the myth of "animal spirits", such that the economy's performance is driven by something irrational, something like a gift from the gods.

Similarly, Schumpeter, influenced by Max Weber (who, for his part, was influenced by the liberal Protestantism of Harnak) saw innovation as a divine gift, a kind of creative fearlessness with unknown origins that allows for a new beginning in history. Thus, the economy, for Schumpeter, is on a march of "creative destruction," a process that continually restructures the wide-ranging relationships that make up society.<sup>4</sup>The question remains as to how can it be both creator and destroyer. Undoubtedly, it is a metaphorical way of speaking, precisely because it cannot be treated as a fully rational expression. However, it usefully highlights the crossroads at which modernity finds itself: excessive rationality eventually becomes, in Weber's words, an "iron cage," which, in order to be renewed, requires a leader's creative action, whose freedom is individual, and in a certain sense, irrational.

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<sup>4</sup>Schumpeter(1934) distinguishes between invention, innovation and dissemination. Invention involves a product or process that occurs within the scientific-technical field and does not leave it (pure, basic science), while innovation refers to a change that is economic in nature. For its part, dissemination is the transmission of innovation, making an invention a social and economic phenomenon. As for innovation, he defined it in a general sense and identified five cases of innovation: the introduction of a new good in the market or the use of a new source of raw materials (both relate to product innovation), the incorporation of a new method of production (process innovation), the opening of a new market or the creation of a new market structure (market innovation).

Contrary to what evolutionary positions hold, innovation is not possible without tradition, without framing it within the march of history, which is not on the same plane as nature, but rather is on the plane of human action. Contrary to what positions of a historicist nature suggest, human action does not innovate disruptively in the sense that it needs to destroy in order to create; rather, with prudence, it continually interprets and revises the meaning of tradition.

### **Language and work**

This article attempts to show that the ultimate root of the difficulties within modern economic theories to cope with innovation lies in the theory of knowledge on which they rest. By pretending that knowledge can only be built from "clear and different" ideas, these theories nullify the very possibility of innovation, which is only feasible if knowledge is understood as gift and discovery, which involves the use of language in its broadest and properly human sense.

Moreover, if knowledge is only understood as that which is expressible in mathematical language, certainly precision and transparency are gained, enabling the development of a "theory," in the modern sense, that accommodates prediction and calculation. This however, is counterbalanced by the fact that knowledge becomes locked since reason thus understood cannot go beyond what its logical structure permits.

By contrast, at the level of practice, where the economy and especially the lives of families and businesses unfold, people speak in a common tongue that is vague, changing, open to the unexpected, and cannot be captured in a single glance. It is precisely this vagueness and laxity that allows people to understand and face the imprecise and changing circumstances that make up daily life.

Without the relative ambiguity and flexibility of common language it would be impossible to interpret and give a name to the things and changing circumstances on which human life is based. Common language is not individualistic in the way that mathematical language is; rather, it makes sense in some kind of community, where, by its continual practice and given its flexibility, it is possible to give different meanings to everything that is done and seen, and thus to better understand the generic sense of all words. Thanks to this flexibility, language mediates between man and nature; it also facilitates nature as a way toward the fullness of truth that is inexhaustible. The vagueness and ambiguity of everyday language point to the very root of innovation: the creation of value.

Moreover, it is through natural language, a shared practice inextricably linked with a shared vision of the world that man can work and carry out activity that contains meaning beyond the natural. When someone, for example, a lumberjack, cuts a tree for firewood, implicit in this activity is a linguistic articulation of words, such as tree, wood, ax, wood, fire, heat, work, home, etc., that make sense of the singular in the framework of the universal.

In addition, the instruments that man uses to work form— like language— a flexible system allowing them to be used in many ways and overcoming barriers to action that occur in individual cases and circumstances. For example, firewood is only meaningful in relation to a tree, wood, an ax, work, home, family, in short, there is a world view implicit in language, as well as in artifacts. Without the overall flexibility of words and instruments, man could not face the unique singularity of a concrete situation, which is what makes innovation possible. This corresponds, in the end, to the human spirit's openness to that which we call the world, the ultimate source of all possible innovation.

In reality, natural language— like the world— is neither pure convention nor exclusively natural, but rather corresponds to man's very openness to the fullness of truth. Man can never know everything at once; rather he slowly understands the world to the extent that he faces similar situations under different circumstances, where new aspects of reality reveal themselves. For this reason, man cannot express himself in one word and instead resorts to a combination of many different words, with which he attempts to capture and express the inexhaustible riches that reside in the things and circumstances that make up life.

Man needs of so many words because he can only express himself and acquire a unique and unrepeatable identity once he forms an essential part of a community that extends beyond time. This clearly implies that knowledge is only possible such that "to understand" is the same as "to understand each other," as the poet Pedro Salinas so rightly perceived: "we know everything all together."<sup>5</sup>

In any case, language and knowledge is meaningless unless it ultimately refers to the community of all men. As Thomas Kuhn noted, all scientific knowledge implies a community of practitioners who have a shared language and who submit themselves to an authority that is responsible for establishing the limits of the practice, which is to say, a language that all members are capable of understanding. But at the same time, this community would not be possible without that other, broader community that is based on the use of common, everyday language and, without which, smaller, more specialized communities would be trapped in the rigidity of their own methodological enclosures.

Modernity somehow intended to free human knowledge from its dependence on the flexibility of common language that requires a community and authority. There was hope that the moment had arrived in which universal, abstract human reason— that of a hypothetical, isolated human individual— would be enough to reach a holistic, rigorous understanding that is certain of all reality. This attitude led to a radical reversal in the theory of knowledge, as evidenced by the Kantian mode of understanding modern science. Thereafter, the unity, meaning and value of human realities such as knowledge, language and work, could no longer be known from the reality of things, which was considered unknowable and chaotic. Rather, they sought to understand human realities from a "mathematical" language that is, above all, rigorous, clear, distinct, and radically individual.

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<sup>5</sup> Salinas, Pedro; *Ensayos II*, 169: "todo lo sabemos entre todos"

Thus, the modern concept of language recognizes numbers,<sup>6</sup> not words, as central. Indeed, numbers are understood as the final expression of the perfection of human knowledge because numbers are pure convention, totally independent of reality. Their accuracy is not a property of individual numbers, but rather comes from their position in the series that defines them, that is, from a pure construction of the human mind, which permits the affirmation of the "perfect rationality" of each. It can be said that the main objective of the eighteenth to twentieth century Enlightenment was to reduce the word to a number, a mere sign, because only then all knowledge would be "rational." In search of supposedly certain knowledge, the word was separated from its function in revealing reality, closing off the possibility of understanding the meaning of innovation at a deeper level.

By the end of the nineteenth century, some began to overcome Enlightenment optimism and realized that language is more than a mere instrument that man can devise according to his preferences in hopes of dominating nature. It cannot be reduced to a mere system of signs that determine the totality of objectivity nor can it be subjected to a process of analysis and calculation. The very nature of language shows that *a priori* knowledge is always provisional and perfectible, that without common experience it is impossible to advance toward the knowledge of the truth, a property situated beyond thought and the rules of logic.

This is so because the connection between words and different, concrete situations cannot be accurately established with *a priori* precision, but is rather learned through daily practice from the worldview that each community possesses. Every language contains a part that is hidden, that cannot be fully expressed, and that somehow reflects a part of reality that is not fully transparent to reason. At the same time, since the human mind is not capable of expressing all of its knowledge in an instant, man must relate it to himself and, in so doing, adjust his understanding. In this sense, human understanding can be called something like "constant self-communication." Human speech cannot express the spirit itself, meaning that we are neither able to know ourselves perfectly nor achieve complete self-presence. Nor do we fully know who we are, or what we know, or what we can eventually come to know.

Paradoxical as it may seem, the human spirit approaches the infinite by unifying with the body's finitude and temporality, demonstrating that this approach is a constantly renewed act that freely projects beyond itself. Through these constraints, within a community, a road to freedom opens up, enabling a variety of schemes that make the continuous advance toward the truth of things possible.

This same finitude and temporality of the body makes man always think, speak and act in the here and now, within a community, in a particular and determined situation, with a view to a particular interest. Thus, the general meaning of words

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<sup>6</sup> Leibniz sought to reduce words to numbers, to rational precision, intending for all knowledge be the result of calculation. Only then would it be possible to build more complex concepts from the most basic ones, rebuilding all reality, which in the end would be identical with the source of divine reason. For Leibniz, the creation of the world can only be understood as a result of "God's calculation," resulting in an ideal state: the best of all possible worlds.

themselves becomes enriched by the continuous challenge of expressing and making sense of the unrepeatable uniqueness of each of these situations with which we are confronted throughout our lives. The very use of language leads us to the heart of a community and to a better understanding of the meaning of words, actions and things.

In the end, the root of the phenomenon we are calling innovation is found in the fact that each and every person, in their respective communities and in different and unique ways, gives expression to the same situations with different approaches and interests and in different languages and cultures. This expression, however, is never done arbitrarily.

Given that language cannot be established *a priori*, it is possible to go a step further and argue that innovation cannot be understood from a theoretical point of view, which is also true of neoclassical equilibrium models. The only way to understand innovation is through practice in which one must resort to the use of language that may not be exact and that, unlike mathematical language, does not acquire its meaning from its own logical structure, but by referring to its use within a reality that it cannot fully express. Only in this way is it possible to achieve a kind of practical knowledge that includes the concrete and individual within the abstract and universal and that takes into account the many circumstances that continuously affect the way life unfolds. The dynamism of the practical opens the way to a breakthrough in understanding that cannot be achieved by theoretical reason because of its static nature.

In any case, innovation is only conceivable where the expansion of understanding is possible, which, at the level of practice, can only entail strengthening and reinforcing the totality of meaning wherever innovation occurs. Being open to the changes that exist in history and language implies changing the conditions that make understanding possible. These conditions are never completely transparent and they produce new viewpoints and visions of daily reality that nevertheless are not absolute given that we are always involved in a tradition that we have not made, but rather that we have received and cannot fully understand.

The discovery that human freedom and rationality are never abstract or absolute, but that they are always located in a particular community striving towards the realization, of a specific project in the here and now is at the root of the crisis of modernity and, more specifically, the crisis of modern economic theory. In order to advance understanding and action it is important to contend with specific situations shaped by tradition and authority that provide consistency and life to each community. Moreover, the way in which the critical role of reason is understood against authority within the tradition of a community is of critical importance.

In dealing with the dominant position in postmodern economics, it is important to stress that innovation is not divinely inspired and does not proceed from the romantic and individualistic notion of genius, but rather requires one to be steeped, in the deepest sense, in the authority of each tradition. Thus both the historicist and evolutionary lines of thinking face a serious problem: innovation is

not just exogenous, but also irrational. By understanding the real and communitarian sense of tradition, it is possible to discover that hidden something that is always present, but rarely clearly seen.

As a result, innovation requires a sense of tradition and authority, that is, it requires the recognition that in every received practice there hides some higher wisdom from which it is always possible to draw a renewed and deeper view of that same practice. In short, a meaning that can only be acquired with practice, trying to live first what is found in traditions, then to discover the deeper meaning of that which has always been done. The classic phrase *primum vivere deinde philosophare* expresses this sense: first live and then reflect in order to discover the deeper meaning of the ways of living. To achieve this kind of wisdom it is not enough to rely on the abstract generalizations of reason, but rather requires, through practice, being steeped in the shared meaning of the true and the just that underpins every community.

### **Tradition, reason and innovation**

Unfortunately the phenomenon of tradition has been little and poorly understood. Recently, in the mid-nineteenth century, J. H. Newman proposed a new and interesting way of considering the meaning of tradition. Along with receiving life from our parents, human beings learn a language that is made up of more than just rules, but that, thanks to the use of words, proportions a unique worldview that is proper to the tradition of every family. Through the education received from their family, human beings learn to make use of their reasoning powers, to govern, to understand and to find their bearings within a tradition, a story started by their ancestors into which an individual's story is introduced.

Work and language are the foundation of that which is proper to man, tradition, allowing human beings to move towards self-knowledge and to discover what is best to do in a given situation.

When someone performs a task as simple as say cutting firewood with an ax, he conducts an activity that has been done before and that was discovered by his ancestors. Through language and work, he has learned to perform this activity thanks to practice within a tradition or community, which has also received a worldview. In this sense, work, like speech, is not a strictly individual activity, but rather requires a community, a tradition, and a culture that has been forged over time. In order for a community to maintain itself, the people who make it up at any given moment must constantly revise that which they have received.

The ability to take up the received, to make it one's own through practice, is essential for transmitting it to those who come after. Some animals, with man's training, can acquire certain skills, but they are unable to make them their own, and therefore are unable to transmit them, meaning that they do not have language and work and therefore lack the kind of tradition that is proper to man.

Thus, to say that man somehow has tradition is the same as saying that he is a



person, that his nature is fulfilled within history, with and for others, making manifest that this fulfillment is neither individual nor enclosed in history, but rather points to a good that is somehow always present, but never fully attainable. Ultimately, tradition reveals a mysterious unity in which all mankind is implicated and an authentic communication among all men that is above history, i.e. the time that corresponds to each generation.

However, tradition is a complex and ambiguous phenomenon and it is therefore useful to distinguish between capital "T" Tradition and lowercase "t" traditions. The former refers to that which is received and entrusted as a kind of wisdom that is beyond the understanding of both the deliverer and the receiver, that cannot be acquired or understood from personal knowledge and that somehow is received exactly as it is given, while the latter refers to a kind of knowledge acquired and accessible to the human mind that emerges to address specific circumstances, but that may change or disappear over time.

Lowercase "t" traditions function as a deposit, providing existential forms of coexistence that make life easier and free up time and capacity from deliberation because it would be impossible for everyone to decide what he should do at every turn. However, when social circumstances change, it may happen that a "tradition" that once served to facilitate a community's coexistence becomes useless or even an obstacle and so it becomes necessary to abolish it. Thus it is clear that maintaining continuity and keeping a tradition is not the same thing.

Given that nothing obliges a community to sustain that which has been thought of, said or done "forever" just because it has been done forever, it is therefore normal that each generation questions the meaning of their inherited traditions. Only Tradition is worthy of a greater kind of continuity precisely because it alone allows each generation a truly human existence. In any case, prudence is necessary since Tradition is always hidden under a tangle of traditions full of fantastic allegiances that are sometimes very far from the truth, making it hard to establish the difference between them.

Thus it is possible to assert that economic innovation is primarily concerned with traditions, with provisional modes of doing things in the here and now, but they do not make sense apart from Tradition, which gives meaning to work and language and, ultimately, to action.

We must keep in mind that in regard to practical behavior the rejection or acceptance of Tradition is not neutral. In rejecting tradition, traditions lose their ultimate significance because, by denying the existence of a meaning that is given, man loses the possibility of finding his bearings and recognizing any kind of obligation.

In any case, as we have said, innovation is the essence of tradition, language and work. This is so if innovation is understood as the personal taking on of the received, giving a greater depth of understanding and meaning to this gift. It can be said that everyone, in order to make tradition his own, must interpret and reformulate the received with the ever present risk of obscuring its meaning. This

is the case both for Tradition and for established traditions, although for Tradition, that which the divine sources originally communicated to man is updated by closely identifying with that mysterious communication.

Every tradition must be continually revised so that its contents are kept alive and present. Failing to carry out this reformulation implies a kind of unfulfillment as a human being, a failure the human ability to insert oneself and give life to a tradition. The possibility of a deeper understanding of that which has been given, especially in Tradition, is not just the result of accumulated historical knowledge, but more importantly of the capacity of the spirit. In this way a new light and a new meaning are made manifest and, without modifying or breaking with the received, enable the discovery of new facets that were already in the received wisdom, but that until then had remained hidden.

Man's condition as a historical being, of living in time, within a community, of being part of a tradition, of having language and work, enables man to innovate, which is nothing more than a way of renewing the permanent and valuable in every tradition. This is obviously not always achieved by all men, nor to the same degree. In any case when considering history as a whole, innovation is clearly part of the human spirit as the joint action of all men carrying it forward. However, it is important to note that there is nothing about language and work that ensures that the march of history is always for the best or that it will reach a greater depth and perfection in the understanding of its meaning and purpose.

Crises of this kind are not rare throughout history and in them we can clearly see that human essence and its concrete historical realization are never perfectly aligned. In these crises, a community must find a new way of giving historical expression to the mystery of human existence, an attempt to try to understand the essence of humanity, for which a break with past history, or at least conceiving of an entirely new way, becomes necessary.

The salvific dimension of history is evident in that human beings, in overcoming their daily battles, learn to handle themselves in face of the cosmos' positive and negative forces and are able to construct communities, from which the practical knowledge we call economy and politics emerge. With these practices, human beings find that they can cope more simply and safely and provide for their existential needs. Indeed, it eventually is made clear to them that tradition and the community provides more comfortable and protective existential forms that free them from the anguish of a shapeless existence. Only as a member of a culture-- a tribe, a people, in short, a tradition-- does man receive the form and meaning of his existence, providing him security, freedom, and ultimately some kind of salvation.

Man's daily and immediate needs are more likely to be peacefully met in some kind of community, guaranteeing the resources to control his own existence, where, under certain forms such as marriage and family, the possibility of a sort of coexistence that provides answers to questions about his own being emerges. It somehow becomes possible to essentially understand the riddle of his existence. Clearly, only then, history, language, work, tradition and culture appear as

salvation, as something that blanket and ensures his true existence, so that history emerges as the most immediate form of religion.

But we cannot forget the crises in which historical situations arise that reveal contradictions between fundamental experiences of existence, when something emerges that, rather than protect and unite, forsakes and scatters, and the history's march then becomes a threat and a problem. Man then begins to suspect that there is no progress towards the essence of humanity, that it is not a road to salvation, but rather that this essence disorients, numbs and alienates man. He is then forced to consider the search for new paths, new ways of managing the mystery of his existence.

Faced with this reality and critical of the Hegelian philosophy of history, Karl Marx concluded that until then our civilization's history had been a path towards alienation and proposed the need for a revolution, for a new beginning in history, for radical innovation disconnected from any tradition. This approach, despite everything, clearly indicates that, for Marx, only this new history can provide salvation for man. The question of course remains as to whether or not it is possible to start "from scratch." Is a "new history" without tradition possible? Is man capable of such a radical innovation that will lead to ultimate salvation?

In this sense, and contrary to Marx, it must categorically be stated that no innovation is possible outside of tradition and history. Not even history can be defined as a process of "creative destruction," a Schumpeterian expression clearly influenced by Marx. All innovation is relative and is produced within history, which means taking into account the long chain of accumulated innovations, both large and small, carried out over the years by different communities and traditions, which have led to this network of artifacts and ways of doing things that support a culture with their respective visions of the world and of man. The passage of time is highly important because man does not learn everything at once, but does so sequentially within traditions and with specific and unique interests in mind.

Man's work, which is an essential part of innovation, is the synthesis of Tradition with other traditions, a vision of the world and of man that has a fixed core and a more temporary one. Man, it can be said, is always working since he never ceases to "make his home," which is the center of "his world." Work demonstrates that man lacks a clear idea of what constitutes "his world" or "his home" where he hopes to find his true destiny and the meaning of life. In this sense, it might be said that man cannot stop working because he does not have a permanent dwelling given that he cannot live in the wild like other animals.

More concretely, in building a "home" man does not merely repeat a fixed, established pattern like bees with their hives or birds with their nests, but rather man is always testing out the road that leads him to his home, the place where human life acquires its fullness and meaning. It should be noted that Aristotle assigned to economy precisely the goal of building a home, that is, pursuing happiness.

Man works because he loves, or put another way, because he desires to know

more, to increase his knowledge, because beyond his own consciousness he tends toward a truth that he never fully knows and that increasingly attracts him as he comes closer to it. Man principally finds this truth in living, in his own action, talking and working in community. Contrary to what has sometimes been said, the soul is not everything, but rather is openness to everything, which is a way of showing that knowledge is inventive rather than casual. To know is not to remember, as Plato thought, but rather the possibility of an encounter with the unexpected, which broadens and deepens that which is already known. Man does not know the truth until he gets closer to it, which leads him to desire it more.

Man innovates and works because he is free, because he tends toward something that exceeds him, an end that is always beyond what he can attain with his own strength. If he were ordered toward a fixed and predictable end that he could acquire with his own strength, man would not innovate or work; he would instead live embedded in the enclosure of the cosmos like the rest of the animals.

Just as language's flexibility makes it possible to delve into the meaning of words as they are used in specific circumstances, it is also the flexibility and versatility of tools, especially those used with the hand, that makes it possible to delve into the meaning of what man intends to do in each moment and circumstance. Man can only really live his life, talk and work, innovate, be free, and advance in his understanding of truth and the good in a contingent reality.

Techniques, along with tools and language, are essential for human labor, allowing man to better understand the reality in which he lives. Just as man cannot express himself in a single word, he also cannot express himself through the building of a single thing or artifact, but rather to know himself, man must do many things and in many ways. For that reason, there is no such thing as a universal or general technique, where every unique thing is organized, but rather there are a multitude of techniques that are determined by the singular end to be achieved.

There are, in principal, many, constantly changing techniques. New ones appear and others disappear, but they somehow form a unity since they all refer back to the basic and universal instrument that consists in the articulation of the hand with language. In human action there is continuous movement between techniques and their aims, just as in language between words and things, enriching the know-how of speech and action.

It is clear that no technique fully controls its object, but rather somehow discovers it in giving it material expression and in attaining a reality that was previously unknown. The achievement of this reality is dependent on the operational or practical road chosen that varies and continuously splits, so that the objective is never fully attained. Furthermore, objects are defined and set in relation to a network of devices that are also unstable on their own so that objects configure each other. As with language, concrete objects only acquire their meaning and significance through this network of tools, techniques, devices and available materials.

Innovation is possible and work has meaning with an outlook that searches for the

concrete, for the object to be achieved in the here and now. Man only works in the true sense when he is to solve the know-how problems posed by giving shape to that which is concrete. He who is able to accurately settle the continuous bifurcations that arise in giving shape to the concrete projects that everyone faces. A human being is different from a machine because a machine cannot innovate, resolve the unforeseen or, ultimately, work.

An object and its corresponding technique are not able to overcome the circularity that exists between them. It is clear for example that the purpose of medicine is health in particular-- that of this man in the here and now, yet it is not fully known and, despite efforts to the contrary, will never be fully attained. A doctor's decision that a patient is cured is beyond technique itself and resides in the doctor's prudence, which is part of his medical skill. In this sense, techniques involve a kind of projective knowledge that is used to the extent that in doing one discovers what is best for each case; it is an endless task that can always be improved upon and is immersed in time and corporeality. Technique is thus a science of means guided by an intuition of the good and the best in each case.

Technique is a humble and hopeful science that requires faith and involves giving shape to a nonexistent object, constructing it with and for others. Theory, by contrast, is a timeless knowledge with a foreseeable end that does not depend on the conditions of reality. Within theory, innovation thus does not exist since everything is anticipated from the beginning.

### **Recovering innovation**

At this point, by way of conclusion, we can say that both antiquity and modernity have tried to avoid or eliminate the very human tension that exists between nature and history, which is precisely where the capacity for innovation resides, and as noted, is the core of tradition.

The ancient world, bewildered by unpredictable changes of history that were attributed to the caprice of Fortune, opted for the stability and circularity of nature and, in so doing, tried to shut out innovation. Indeed, the ancients held contempt for work, as seen in the idea of slavery. The development of the city, which emerged from innovation's continual thrust, represented the possibility of a world far removed from nature, which always requires more energy, more technique and organization and where, in some way, the principle of disorder is always present. Relying on innovation means implementing a principle that, unlike nature, is not self-regulating.

Plato thought that by taking shelter in contemplation, one could achieve an immutable world without the disturbing forces of innovation. This position is still a way of dominating nature through thought, favoring the world of ideas where the essence of things is captured in the abstract and taken out of the changing flow of time. Thus, with the hope that the world of knowledge could be as stable as nature, the bright and clear, but barren world of theory emerged.

Modernity, on the other hand, supposed that innovation could be developed once and for all, so that history would be the progressive realization in time of a perfectly foreseen and planned future with optimal social welfare. According to the principle of universal harmony, little by little, all contingency would be eliminated until a unique mode of connection would be established between contingencies, manifested in a continuous increase in productivity.

History was thus converted into a continual unfolding of all that was given from the beginning. The world became a closed system that, as Leibniz sustained, tends toward an optimal state: the "best of all possible worlds." Leibniz's "monad" lacks anything new since everything is contained in its interior. Within this approach, work is reduced to a continuous increase in productivity, until reaching an unsurpassable maximum. Thus work can only be understood as the tendency toward progressive mechanization or, what is the same, its own negation. The result, as Smith himself pointed out, is a sheer contradiction: the worker becomes more brute-like, while gains tend to decrease and disappear.

The postmodern economy, in turn, has come to the conclusion that an optimal division of labor does not exist, that there is nothing like a pre-established harmony, and has returned to a situation very similar to that of the ancient world. With the disappointment produced by the myth of indefinite progress, post moderns have recognized the ambivalent character of innovation, which is regarded as an ambivalent gift of the gods. Individuals' will to power, their desire for wealth, has sparked a strange kind of innovation that, detached from any kind of tradition, involves the continuous multiplication of different, disconnected products. This has led to an increasingly complex world in which man lacks the resources to organize the array of products available to him and, in turn, they progressively crush and oppress him.

As already mentioned, innovation is inseparable from human labor and it cannot and should not be eliminated, but it should be noted that without traditions and Tradition it becomes chaotic and loses the guidance of reason to eventually turn against man himself, as the legend of Prometheus sought to express. The problem of modernity is that it has shifted reason from action to the product, hence in post modernity innovation is approached from the point of view of the product or service that is introduced into society. Rational behavior is judged not from reason, but from its result and adaptation to the environment in which it is employed. That is why both evolutionary theories, as well as historicist-not to mention pragmatist-are insufficient for understanding this phenomenon.

We believe that the fundamental problem lies in the lack of understanding of both nature and freedom, leading to the rejection of a meaningful anthropology, which, in turn, dilutes human intentionality in the former and overemphasizes it in the latter.<sup>7</sup> Without the "proportioning" that a true conception of humanity<sup>8</sup> achieves,

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<sup>7</sup>Aristotle notably discusses this subject when he says that a part from the city-- without considering the human vocation to life in community-- man becomes a beast or a god.

<sup>8</sup> In reality, innovation, as well as work and even the very meaning of history, become problematic without reference to the notions of Creation and Redemption.

man eventually becomes subordinated to works and wears himself out as a result<sup>9</sup>. Within a tradition, innovation is the creation of meaning because true innovation, even in its external appearance, occurs when life itself is renewed. Man necessarily and continually innovates because his end is not given. Radical innovation is found in discovering human meaning every day.

In a practical sense, experience confirms that the most innovative companies are precisely those that are less oriented toward short term gains, and more concerned with the creation of meaning. This strategy happens to parallel the idea that human beings are happiest when they aren't so concerned with being so, but rather are concerned with doing things well and in service of others.

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<sup>9</sup> This is what Polo refers to in writing about the “modern radical.” See Polo, L. (2012).

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