Nature, Hammers, and Picasso

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The U.S. economy is experiencing problems that extend beyond recurrent cyclical fluctuations in economic activity. More enduring than cyclical fluctuations these difficulties were born of deeply rooted circumstances. Wallace Peterson has described the current situation as an 18-year silent depression. Some see the source of the problem as secular stagnation, others as the downside of a long wave, and still others describe it as our loss of competitiveness in international markets. More fundamentally, our current problems are a failure to address past problems in a way that is harmonious with basic principles of human association. This long-present disharmony has been obscured by the prosperous postwar decades. Our inability to face it is a testament to the strength of our most cherished beliefs.

As a major industrial power following World War II, and with many of the other industrial nations crippled by that war, the United States was in a commanding position. With an enormous stock of natural resources and a hardworking population, it is little wonder that we were generally prosperous in the decades following the depression and the war. A business that could not survive and prosper under those sanguine conditions was a poor one indeed. And a merchant or manufacturer who could not profit...
was either very unlucky or very stupid—perhaps both. This real prosperity seemed to validate the imaginary prosperity code.

This address is titled "Nature, Hammers, and Picasso" because I want to speak about value theory, experience, and the life process. The life process I want to draw attention to includes, but goes beyond, biological elements; includes, but goes beyond, the hammers that we use to pound our living out of the natural world; it also encompasses the artistic and the aesthetic.

**Nature and Value**

Theories of human nature have usually split over the question of whether we are primarily creatures of instinct or of reason. In moving from a conception of human nature and activity determined by nature rather than by God, a change that transpired between the thirteenth and the eighteenth centuries, a step was taken toward a more scientific conception of humanness. It was a stride in the right direction, perhaps, but on the wrong path. It was not until Darwin that the importance of the natural world was more clearly focused. John Dewey adhered to neither of the age-old views of human behavior. He sought a naturalistic explanation of human behavior and moral values, and following Darwin, put mankind back into nature with evolving biological and social processes. Dewey had the ability to seize the significance of the obvious. That we are born babies and begin our lives as infants entirely dependent on our elders for instruction is a generalization that may not be profound, but which is certainly important.¹

The separation of intellect from the concrete empirical facts of biological impulse and habit formation is a denial of the continuity of mind with nature. It ignores, for example, the fact that when a baby and an adult are confronted with the same problem, one has already formed habits that the other has yet to acquire; one has highly organized habits, and the other has unorganized impulses. It also fails to recognize that knowledge and judgment are acquired.

Both Dewey and Veblen lodged their inquiries in the natural, biological world. From that perspective, there emerged a clear message regarding the substance of the life process. Homo sapien is a part of the natural world, one species, like all others, composed of chemical elements, organic fibers, and biological functions. I grant that we have created, by force of imagination and for our
own vanity and insecurity, a supernatural world we believe is highly influential in determining behavior and morals. But I am here concerned with the influence of the natural world—biological, chemical, and organic—on behavior. To say that Homo sapiens is a part of nature is not to say that it has a fixed nature—quite the opposite. Mine is an evolutionary view of nature, in which humans are malleable and adaptive. The pre-Darwinian view was of an immutable nature.

So far as I know, nature has no moral code, but it does impose a code of behavior. The code applies to all species, including Homo sapiens. Violations are measured in terms of consequences, although elapsed time between action and consequence is variable. Natural processes impose consequences on actions without attention to the social relationships created by Homo sapiens. We have invented hierarchical structures that advance some people over others, give power to some and render others powerless, create status relationships of master/servant, employer/employee, owner/worker and many more. But, nature does not take these into account. The frontier has been an important idea in institutional analysis because it affords a stark view of the relationship between man and nature. A thorn does not distinguish between the social standing of those it pricks. The toughness of the hide or fabric, not the owner’s social standing, repels the point [Webb 1951]. And, little is the effect of wealth on the unfettered forces of nature. Without social intervention, a prince and a pauper are equally likely to die in an avalanche or from a rattlesnake bite. And I do believe the royal bowels move about the same as those of the peasants. In these homely examples, actions are followed more or less closely by consequences, and behavior is changed or not, on pain of a quick administration of discipline. Buckskin is better than satin in dissuading the thorn. The skillful recognition and avoidance of a potential avalanche or snake bite are far better than a heavy saddle bag or blue blood in overcoming these perils.

More deeply complex circumstances usually require more time between action taken and consequences felt. The farther apart in time, the more difficult the assessment or judgment of the action. There is often a long time between the confluence of thousands of past actions and the emergence, for example, of environmental damage. Hence, cause and effect may take time to establish and this is precisely why deliberation (intellectual experiment without recourse to action) may be a wiser course than irrevocable action.
Darwin indicated the direction, and anthropology helped us to understand the relationship between the material and the nonmaterial aspects of culture. The study of preliterate societies made us more sensitive to the many nonrational traditions and beliefs of all societies. But the failure to recognize the difference between what Dewey meant by a natural philosophy of the life process and moral behavior and other "naturalist" explanations is fundamental. Social Darwinism in all of its myriad disguises, for example, has greatly influenced the direction of social policy and experiment. And, the influence of this idea is more widespread than is commonly thought. It provides an ideological justification for policy toward the poor and a foundation for the idea that there must be strict control over the drones who labor in the mine, factory, and field. It is a major justification for invidious comparisons of people. Though wrong, it is still a factor in forming policies governing human association and it promotes disharmony with natural and instrumental principles. Irrational and non-scientific aspects of human association—what we call institutions—have led us to neglect the obvious.

Hammers

Certainly Homo sapiens can use knowledge to reshape nature. We can even accelerate many natural process, rearrange genetic structures, and create hormones in laboratories that were once available only from nature. But the natural world yields a significant insight into the instrumental process that makes this knowledge possible. Instrumental value is derived from natural processes because tools, being human creations, are continuous with nature, not external to it. A factory offers the opportunity to view the stark operation of the instrumental code of conduct just as the frontier allows us a view of the code of nature. What has been said of the code of conduct of nature applies, perforce, exactly to the code of conduct required by tools.

Some reject the emphasis on the place of instrumental value in the deliberative process. They see it as too cold and intellectual. They see intellect as unproductive because it blocks generosity and creativity. They would maintain that the moral prophet should be honored and obeyed. An attitude that would silence him or give his pronouncements anything less than a respectful hearing is to be condemned. Some are hostile to the method of science because it is
deterministic and inhumane. Actually, it gives us freedom where we want it and can do something with it. It has been the ideologies and dysfunctional social habits that historically have put blinders on our thoughts and shackles on our actions. These have made people dogmatic and willing to destroy those who disagree with them.

Instrumental values are fundamentally equalizing, which is why the method of science so threatens our most enduring beliefs. Despite its supposed inhumanity, science exemplifies the humanistic ideal in many important respects.

A critical point is that the instrumental character of the means-ends continuum will tolerate deviations, but not without immediate or subsequent consequences. Foolish choices beget a stream of consequences that in the extreme case end the life process. Attachment to and association with institutions that have become imbecilic may take some time to display the full force of the undesirable consequences, but eventually these surface. Stopping at a stop light is relatively simple; apply the brakes. A person could put his foot on the accelerator, or on the dash, or out the window. Experience does show brakes to be more reliable. And, not very many would use prayer as a means of stopping a car—at least they would not actually use it very long. Being beholdin' to your neighbor engenders a cooperative process that amalgamates the intellect against the irrational. The aggregate life process stands a better chance of adaptation when intellect triumphs over superstition.

Since we live in a world of change, new problems will arise, choices must be made, and value judgments will be part of choosing. They will be made by blindly following tradition, or they will be made in association with careful inquiry and deliberation. The application of organized intelligence drawn from all the sciences and humanities—the funded knowledge of previous means-ends relations—is the most adequate way to do it.

Social adjustment depends in part upon perception of the objective circumstances of possible achievement. The principle of technological determination is the impetus to such adjustment and implies that there must be a perception of what can be done, as opposed to what is now being done. This perception is a critical part of instrumental efficiency. But only individuals can perceive; societies cannot. The ability to control perception and to adjust it to meet the contours and requirements of instrumental function
depends upon the relative strength and depth of the layers of ceremonial imagery and upon practice heaped on top of the instrumental capability. If enough of these layers can be peeled back, an adjustment toward a more instrumental efficiency is possible; but, there is no guarantee that such adjustments will occur. Adjustments in perception may miss the mark, sometimes by a large measure. And instrumental reality may be seen as unacceptable because it will cause too much change in the status relations of the community. Whatever the outcome, a prerequisite to change and adjustment is the perception of a gap between what is instrumentally possible and what is being done. Here is one place where an integration of artistic experience meshes with instrumental function. The richness and completeness of experience enhance the acuteness and subtlety of perception. The more finely we can polish the looking glass, the better will be our perception of self and society and the more humane the conviction that emerges from experience.

Our medieval ancestors found no intellectual difficulty in holding to the conviction that a minority of people—monarchs, nobles, and clergy—should control the majority in all of the affairs of life. It was "obvious" to them that some kinds of people should dominate others. Beginning in the eighteenth century, intellectual inquiry questioned traditional authority as it had never been questioned before, and this questioning has continued more or less actively ever since. But the process has not ushered in an egalitarian society by any means.

Notwithstanding our tradition of questioning authority, there is practically universal acceptance of the belief that it is "obvious" that those who possess money should dominate the economy. The institutional power of the medieval ruling class was gradually transferred through the institution of property to a new order.

In the institutional quarrel between the old and new order, the issue was a sociological one of right to class, status, and power, although it was argued in terms of presumed productivity or non-productivity. In this situation, the middle class advanced arguments that justified their right to income in terms of their productivity. Since the middle class won in the end, the argument that money was productive became entrenched in middle-class belief systems. Money now conferred on the middle class the authority and the right to give commands that was once limited to the old rulers. The well-being once ascribed to ancient and
medieval rulers was transferred. The new institutions decreed that property—not nobility—entitled one to give commands. Under the new institutional situation, money was the prerequisite for giving commands. Much as the ancient and medieval rulers were perceived to have creative potency, we confused an institutional arrangement with the ability to make possible the rise of industrial society. We fell into the trap of the fallacy of composition, believing that because the institutions conferred power, power was inherent in the empowered individuals. This fallacy in folk and economic theory has persisted to the present. This new code represented the activities of business entrepreneurs as the dynamic force behind the creation of wealth and, above all, it glorified the thrift of the parsimonious businessman and created a new cultural hero. According to this new code, capital funds accumulation and investment are the creative force in the economy. Thus, a new authoritarianism was made to seem normal, rational, and inevitable.

Economists are accustomed to saying that property and prosperity are the fruit of productive work. It is undoubtedly true that throughout recorded history, most property is a product of tool-skills and labor, but throughout most of that time, those who performed the work seldom had the right to benefit from it personally. And, of course, the prosperity code that attributes productive stature to money is not true; it never has been, and it never will be.

In the industrial economy, a principal form of organization is the business corporation. The modern corporation is an effective and flexible form of property far better suited to the requirements of complex industrial production than to individual proprietorships and partnerships. Its ability to gain access to large sums of money for the purchase of expensive plants and equipment, potential immortality, and to employ specialists is all too well known to require more than mention.

At the same time, the corporation perpetuates many of the characteristics of medieval feudal society. Its structure is one of hierarchy and authority and of superior and subordinate, in which the superior is the only legitimate authority over the subordinate. A pattern of relations using the skills of many different specialists in an industrial setting might operate more functionally if the relations were more equal and collegial, but the parent-child feudal ideal has proven too tenacious to permit that adjustment in
most cases. This preoccupation with hierarchy leads to a distribution of income and other rewards within the bureaucracy that is deemed appropriate to maintain a level of expenditures suitable to that status. Rewards are distributed in the bureaucracy appropriate to one's status—the medieval policy. This type of classification creates special problems for many specialists; they must abandon their specialization and enter the managerial hierarchy in order to move up the institutional hierarchy and be seen as successful in terms of prestige, status, and income.

The perpetuation of feudal patterns in the corporation generates a great deal of anxiety, insecurity, and conflict. Specialists are required to produce products efficiently, which means increased interdependence and cooperation between people of low and high status; higher status persons must depend upon lower status persons. In a hierarchal system, the subordinate employee is dependent upon the superior employer. In technological situations, the relationship is one of interdependence; each side has something to offer. Each side gains from cooperation, but inherited practice concentrates legitimate power in the hands of the superior, even though (s)he has decreasing ability to exercise it because of scientific and technological developments.

Up to this point, it might be said that both nature and hammers administer the consequences of stupidity or intelligence without regard to rank, status, or bank account. Neither makes invidious distinctions.

**Art and the Artistic**

Institutional theory has dealt with evolutionary processes and technological and instrumental value theory. It has done little to integrate a theory of art into its perspective. Clarence Ayres, for example, had much to say on the process of artistic creation, and in his personal life artistic experience was highly valued, but he did little to bring the aesthetic and artistic experience into his theoretical purview. Dewey addressed the subject in *Art as Experience*, but not much attention has been given to this work. I propose that artistic experience is a vital but missing element in institutional theory. The integration of a theory of artistic experience would improve the Veblenian dichotomy, because it would help shed light on the genuinely humane nature of that analytic structure.
Artistic experience, often more ambiguous than tool experiments, requires more time before the genuine character of the consequences emerge. The separation of artistic experience from daily life is an action/consequence process of this character. One of the important consequences of this process is involved in the organization of production and consumption, a point to which I will return.

Unlike cold science, art is often thought to arouse and engage our emotions. Unlike the technological, the institutional heritage is thought of as emotional. But, there is no reason to think that emotions are any more ceremonial than they are technological. When emotions are seen as the source of artistic inspiration and tied to ceremonial observance, art cannot emerge as a constituent element of daily life. Art is reserved for what might be called leisure activity, and participation is limited largely to the leisure class. Ceremonial rites are often a substitute for artistic experience and are thought to be the emotional rudder that prevent tools from turning us into robots.

Human experience loses much of its lust, beauty, and excitement when ceremony dominates the arena of artistic activities—activities that could add far more to our understanding of human association.

While control of the arts has been dominated by the wealthy, occasionally there is a loosening of the shackles that bind art to the privileged class. Mozart's opera "The Marriage of Figaro" was more acceptable than the play, partly because the music diverts attention from the message, a message that foretold the French Revolution. Usually, though, an appreciation of the lessons of artistic experience requires more leisure than most people have. And since art is poorly integrated into the industrial, material aspect of life, it is greatly diminished as a medium for changing perceptions or for improving the lives of most people.

The fact is that much of the world's great art finds its resting place in the great national museums, loot gathered by the monarchs of Europe and the emperors of Japan. Other nations have permitted the nouveaux riches to stockpile art in private collections. Being rare, it was often expensive and not surprisingly a prime source of conspicuous consumption. And, many communities build the opera house, gallery, and museum to show that they are not wholly absorbed in the pursuit of material wealth. This interest in cultural pursuits actually increases the separa-
tion of art from daily experience. Dance, for example, may have emerged as an imitation of wild animals, first by those who hunted them and later by those at a more vicarious level. Still, the art of dance had a grounding in the material "working" activities. It meshed with everyday life. Decorating the office of the chief executive probably does not represent a significant integration of art into the workplace.

Dewey tied the separation of art from daily activity partly to the emergence of mechanical mass production. Our economy places emphasis on consumption but fails to make industrial production a source of satisfaction. Most industrial production is mechanized; as the machine paces the worker, the work becomes monotonous, and workers are denied the satisfaction of producing a finished product. Under this regime, the workers' experience results in fragmentation, nullification of the creative force, little psychological enjoyment, a lack of pride in workmanship, and some sabotage. The system sets up an antagonistic relationship between worker and management. Setting all of this right is overwhelming, but the fusion of form and content of function with creation would go a long way in overcoming this inhumane and inefficient system.

Workers are more difficult to coerce today than in earlier centuries because of rising standards of living and a declining belief in the idea that poverty and social injustice are part of the natural and inevitable order of life. Experiments are being tried that give workers more responsibility in organizing the conditions under which they work. For example, when Edward Demming offered an alternative approach to the organization of management in the United States, it was flatly rejected. No less hierarchial, but considerably behind, the Japanese automakers were willing to experiment with alternative organizational schemes. It worked. If further experiments such as this work, they could succeed in focusing more attention on the means-ends continuum in production. But workers will have to be smarter than they are now. Success will hinge on a willingness to be reasonable, to integrate idealism with realism, and to blend art with science.

Unfortunately, the educational system, a primary source of smarts, is itself an undesirable outcome of separating means and ends. It espouses the idea that education is a preparation for the future (ends) and so looks upon education as a production process of taking raw material and modifying it with a view to turning out a product that conforms to certain specifications. This ideology en-
courages the practice of more or less blindly following tradition. It does not try to make education a thoroughly rewarding experience while it is going on. It also encourages society to orient education along class and status lines, where vocational or industrial education is reserved for the lower classes. The upper classes get an education that permits them to give the big commands and determine the "ends" for which the industrial system is to be used. The curriculum of the contemporary business school illustrates this dichotomy. There are very few courses on industrial or production management and many on financial management. The former evidently belongs "on the job" or in the vocational school, while the latter puts one in a position to make the big decisions. But even for these people, education is dominated by the prevailing ideology and norms, and fixed ends are seldom questioned.

Shrewd, realistic, and narrowly practical men know how and can usually succeed in dealing with idealistic threats to their supremacy. We are confronted with the fact that history reveals many instances to support the attacks of those who disparage science and intellect and would limit their significance to supplying incidental help to the execution of goals born of affection. Thought is often a specialized and remote pursuit of schemes that leads to "success"; it is often made a tool for a systematized apology for things as they are and in support of a power system. Most applied science is used to promote success of business and the military. "The separation of warm emotion and cool intelligence is the great moral tragedy," as Dewey said. This division is perpetuated by people who deprecate science and deliberation as it is by those who idolize reason at the expense of passion. Idealism, as a rule, has been directed toward aims that are impossible to achieve. It can be made realistic only by introducing deliberation and selecting some foreseen consequences to serve as a stimulus to present action. Then it can bring future possibilities into the present and free and expand present tendencies.

The completeness of experience keeps us from turning material goods into ends only. It allows us to connect means (present) with ends (future) in a way that yields a meaning beyond the purely material. It enriches life beyond material satisfaction. The failure to formulate a theory of artistic experience and to integrate it into economic life is a significant source of moral and economic stagnation.
It is said that the assembly line is efficient, that with it costs are much reduced and goods are produced in abundance. This narrow view of efficiency has led to much mischief by economists and to much human suffering. It separates means (present) from ends (future) and neglects the more robust view of efficiency. What is called for is a view that includes consideration of the worker as equally important as the good, and the good as not merely the end result of production. This view sees goods as being more than pleasure giving and recognizes that the material artifacts of production are multifaceted, with multiple and interactive attributes, and that workers are also multifaceted, multitalented, and not to be poked into a slot as just another cog in the great wheel of the production engine.

As the relative scarcity of earlier systems gave way to the outpouring of goods, a change in perception also began. Workers, who were treated as cogs, now came to see consumption of goods as the main, even the only reason to work. Work become the means to an end formed not by intelligence, but by deception. Thus, the worker’s chief concern is the desire for security and for a relief from drudgery. Emotional development is stunted by striving for these ends, and it eventually leads to a stunting of our overall development. People come to see life only in material terms, and the moral code is reduced to a kind of material expediency. How else can we explain the overwhelming place of advertising in our society? Advertising is an activity that Heilbroner once said proved to children that adults would lie for money. How else can we explain the code of business ethics that would sacrifice people for profits and neglect to develop a humane way to adapt to changing economic circumstances?

The separation of production from consumption is one of the significant errors of the modern era. Consumption becomes driven by display and pecuniary emulation, rather than by function and intrinsic worth. The separation of the artistic sense from both forces us to rely on other, less complete criteria for judging the desirability of material goods. The problems faced by our society and our economy rest fundamentally on our failure to adhere closely enough to a complete concept of the human experience. We are too far from understanding the importance of the natural world as an arbitrator of behavior. We advance the importance of the supernatural world at the expense of the natural world, and, hence, our moral code is often inhumane. We have an incomplete under-
standing of the actual relationship between tools and people. We have glorified the inventor and the business process that we see as causal and have neglected the instrumental and non-invidious nature of tool/people relationships.

For some time now, economists have been in the habit of dualizing the positive and normative aspects of their field. Perhaps it is time to distinguish between the reasonable and the unreasonable. The latter is driven by some preconception, some path of action, some desire that overrides all competitors and secures the sole right-of-way. The former is sensitive to complex situations, does justice to all facts, entertains competing hypotheses, is responsive to unique or different situations, has the patience and persistence to make sure the problem has been identified correctly, possesses the creative imagination to envision new possibilities, recognizes a bias toward objectivity and the ability to discount one's own prejudices, and has the courage to revise one's beliefs in light of new experience.

There have been occasions in the past when professional economists believed that both the essential theory and probably most of the significant problems were known, understood, and solved. Contrary to the expectations of these scholars, we are experiencing problems that economists have not, and evidently will not, address. Our theoretical development is far from the completeness for which so many yearn. Among the important ideas entertained by institutionalists is that the history of inquiry reveals an overwhelming number of incorrect dualizations: mind and body, nature and man, fact and value, is and ought. To this list, we should add art and science.

By 1952, the Flint Hills of Kansas, my boyhood home, were about as close to the frontier as was possible. Aunt Evelyn and Uncle Lou, their five children, my sister, and I lived on a 160-acre homestead. We churned cream into butter, pumped water for indoor use, and read without electric lights (there were no electric lights). We were not opposed to them; it was just that there was no electricity. And, hot water for a bath came from a boiling pot poured into a round metal tub, not from a tap; there was no tap. The toilet was outside. It was there I learned the true purpose of the Sears, Roebuck catalog.

I kept my horse in a small corral. The entrance was governed by a heavy wooden gate made of native oak timbers, worn smooth by use. The gate was latched by a two-by-four that slid into a
notch in the stationary gate post. The years, the force of gravity and the cold temperatures whipped by a Kansas prairie wind conspired to make it hard to open, especially for a ten-year-old of slight build. When "Pap fetched the tub of salt pork a rattling kick," Huck Finn allowed that "it warn't good judgment." The same might be said for a rattling kick to a stubborn gate. I was impressed by nature—and by Mark Twain. I had not yet heard of instrumental value theory, but the logic of tools had begun to break on me.

**Notes**

1. In this section, I draw on John Dewey's work, especially on *Human Nature and Conduct* [New York: Random House, 1922], and on my teachers John Hodges and Joe Brown.

2. In this section, I draw heavily on John Dewey's ideas as expressed in *Art As Experience* [New York: Capricorn Books, 1934].

3. Yet, emotions, as far as I know, are a function of the endocrine system, etc. These systems have evolved along with the species and have presumably undergone change and adaptation with the rest of our physiological construction. These are durable and enduring systems, but they are not immutable.


**References**

