states that it is high time for someone to present an objective picture of Joseph Stalin, and goes on to say that (a)" 'pure of heart' socialists depart amazingly from their usual sanity and realism in their reactions to Uncle Joe and his land, because they expected Stalin to conduct his Russian experiment as Norman Thomas might lead an L.I.D. symposium",.and Norman Thomas "would have shed just as much blood had he been in Uncle Joe's shoes." (b) "Stalin is the supreme practical leader of which Russia stood in sore need about 1928 in order to make good the promise of the Revolution; he created the new material Russia and made it work through his five-year plans . . . his policies, however stern and sanguinary, brought unity and discipline to Russia in the most critical period of Soviet history; and his progress in socializing Russia has been nothing short of amazing." (c) "no honest and informed student of Russian history can doubt that sabotage, intrigue and treason were rife in the Soviet Union in the mid-thirties. Stalin's purges were certainly necessary, even if carried out with unjustifiable savagery at times, but we can hardly be final judge on this latter point."

First, it was not only Stalin who realized the danger of capitalist encirclement and intervention and therefore advocated the necessity of military preparation. The constant threat of the combined capitalist attack upon Russia once the revolution took place was an eventuality which all the early Bolshevicks envisioned. Four years of intervention and civil war substantiated their predictions. At the conclusion of the wars, their vigilance was never relaxed for a moment. Every member of the Communist Party and every man, woman and child throughout the land was prepared to expect a capitalist attack as inevitable, and to prepare for that war to the fullest extent. Second, the ravages of the Civil Wars and the intervention, the economic and political isolation, the ideological and agrarian remnants of feudalism, all these made necessary some kind of industrial and agricultural planning, which had been proposed even by some non-communist engineers during the latter days of Lenin's life. Within the Communist Party itself it was the faction of the Bolshevik-Leninists headed by Trotsky, Rakovsky and others that made the first concrete proposals for an economic plan. It was Stalin, Bucharin and other Right-Wing members who opposed the plan completely, but who, once they had crushed and exiled the Bolshevik-Leninists took it over in toto and adopted it as their own.

Let us turn to some of the political and ethical implications of the industrial and military defense of the country. (a) When the early Bolsheviks subscribed to the idea of a continual threat of capitalist intervention, they were merely drawing an inevitable conclusion from one of their premises i. e., since the Soviet Union represented, in the international arena, the interests of a group, the proletariat, which was the class enemy of the bourgeoisie within each capitalist country, war had to be expected between the capitalistic nations and the first Workers' State. And something more, too. Because of this important class distinction any number of capitalist powers could find common ground for attacking the Soviets sooner than they could



find reasons for fighting among themselves. That being the case, it would be impossible for a single communist country like Russia, which was predominantly peasant, or for any other communist country no matter how highly industrialized, to withstand a combined attack of all the major capitalist countries of the world. Mere military preparation alone, no matter how extensive, would be insufficient to guarantee a successful defense; at least one other factor was of even greater importance. The greatest ally of the Workers' State would be found in it's own class allies throughout the world. Not only would the proletariat of the world be an unquestionable ally if they succeeded in effecting their own revolutions, but they could be a powerful force in preventing their own bourgeois governments from attacking the Soviets.

Due to Stalin's ruthless power politics within the country and to the disastrous Comintern tactics, Russia found herself in the late twenties dangerously isolated and defenseless. It became necessary to make up for lost time and lost international political opportunities by feverish industrial and agricultural "planning." Making an unqualified virtue of necessity should not be passed off as the height of political wisdom. Many students, after analyzing Russian economy and hearing the constant complaints, which filled the Russian press, of administrative negligence and inefficiency, the appalling loss of machinery, tools, rolling stock, etc., and the shoddy quality of industrial products, wondered how it was that the military machine stood up so well in the days before Russia began receiving material from England and the United States. Since no foreigner has to this day been permitted to visit either the fighting front beyond specified areas, or to accompany Lend-Lease material into Russia, we do not know what actually took place during the first year of the war. One can only conjecture that a great deal of what has passed for "Bolshevik self-criticism" was a feverish attempt to keep the production of military material up to at least certain minimum levels. The Russians, as is well-known by this time, can be very secretive, so much so that they succeeded in giving the world the impression that all their military production was as poor in quality as that which the outsider was permitted to see. One must also remember that a country of such vastness, of almost inexhaustible natural resources and manpower, can sustain losses which would very quickly ruin a smaller nation.

(b) Whenever Barnes, Laski, Hindus and others argue about the virtues of furiously-paced industrialization and forced collectivization, they try to forestall criticism by admitting that the Russian government was guilty of cruelty, oppression, terror and death, which they consider unfortunately necessary. These men apparently never stop to ask or to find out whether what happened during the periods of the various plans was actually necessary. Can industrialization and military planning in a country be carried out successfully in any other fashion than by methods of brutality and waste? Was there any opportunity to present alternate proposals which were democratically discussed and passed upon? Are unequal demands of sacrifice,

demoralizing disparity of wages, incomes and privileges, secret trials, mass purges and concentration camps "necessary" ingredients of industrializing a nation—any nation—let alone one which speaks in terms of "socialism" and the "brotherhood of man"? The apologists not only never pose such questions, they blithely assume that everything which occurred in Russia could have been done in no other way. To such important philosophical questions posed by well-intentioned and ethically-minded people as "Can the means of needless oppression and cruelty lead to the ends of peace and freedom?" or "Who is to decide whether it is just and wise to build a dam or railroad even though it may mean the sacrifice of millions of unwilling lives?", the answer of the apologists is not long in forthcoming. Peace and freedom can be attained, is the retort, if one will only trust the political, economic and social wisdom of the Party or the Committee or the Leader who knows what is best for the masses "in the long run." Or the answer is based on lofty morality justified by famous historical precedents. For example, Howard Selsam in his "Socialism and Ethics" writes that examples of human activity "in the direction of freedom . . . are the slave revolts of ancient Rome, the Cromwellian Revolution, the American, French and Russian Revolutions, John Brown's Raid on Harper's Ferry, the great strikes of the modern Labor movement, the Protestant Reformation or the Soviet Trials and executions of spies and saboteurs". Before placing the Moscow trials in the category of the great liberating movements of history, it is necessary to analyze them as juridical phenomena. It is only after historical facts have been established with certainty that questions of ethical theory can be posed. And it is Selsam himself who admits that it is not "easy to determine in every given case in what direction freedom lies and how it is best attained." After all these revealing years since the trials and despite all the factual material we now have at our disposal, Barnes still finds it more convenient to substitute conjectures for facts.

To transcend the limitations of mere factual material concerning Russian history and pose pertinent and valid ethical questions, let us consider the following: granting for the moment the validity of the apologists' argument of the infallible expert or elite, and admitting that the hitherto successful defense of Russia against the Nazis justified the ruthless pre-war policies of the government, what follows? Leaving aside the very important question which has preoccupied political and moral philosophers since Plato, namely, whether any man has the ethical right to decide the fate of another without the latter's consent, how is one to differentiate between Stalin's actions in the defense of Russia and those employed by other dictators of the present and tyrants of the past? Have they not also employed "free" and slave labor to build roads, clear swamps and construct fortifications to defend their own property, power and prestige? Since the most ruthless means seem to be justified for one ostensible purpose, i. e., the defense of the country (which in reality turns out to be, as far as the masses are concerned, merely a defense against being enslaved by a *foreign* conqueror)



where is one to stop? Suppose, for example the ruling elite of any country decides to sacrifice a great portion of the population in preparation for the defensive war; and suppose, furthermore, that millions are decimated during the war itself, but the country is finally victorious. The invader has been repelled, and the elite continues to live. Suppose once more that this process repeats itself in a series of similar ruthless preparations and "successful" wars. The dictatorial dynasties continue to flourish, but the masses always do the dying. If the people in time could articulate their misery, they would be answered with the statement that at least they had their "freedom", they were not the subjects of a foreign conqueror. Such an answer would be cold comfort to masses of people who would begin to realize that life under such static, repetitious circumstances is only a choice between the lesser of two evils, with all avenues of escape or future liberation blocked. Military defense cannot be abstracted from the rich context of interrelated social, economic, political and moral forces within society. From the standpoint of the ruled, a philosophy which conceives life as a constant choice of lesser evil has no viability. And from the standpoint of the ruler, such a philosophy can offer either opportunistic maneuvering or eventual destruction. In terms of the nation as a whole, one would be justified in saying that its inhabitants live both a degraded and a precarious existence.

Fourth, as to the explanations of, and apologies for, the problem of pure military strategy and tactics. As previously indicated, many writers such as Max Werner, Van Paassen, John Scott, Anna Louise Strong, and others, have pointed out that (a) the Russians were not taken by surprise since they had been preparing a long time for the Nazi attack (even during the period of the Nazi-Soviet Pact); (b) the Russian military success was doubly assured when such military saboteurs and traitors as Tukhachevsky, Gamarnik and others were assassinated; (c) all those "swivel-chair" strategists, as Van Paassen contemptuously refers to them, who predicted the defeat of the Russian Army while it was retreating rapidly during the early phases of the war, misinterpreted what was in reality a very clever military maneuver. The Russians were merely carrying out, according to the apologists, a well-laid plan in retreating to heavily fortified positions far into the rear.

First of all, as for the Russians' not having been taken by surprise. The fact of the matter is that the government itself in official announcements made by Molotov and Stalin proclaimed to the world that the Germans had struck without warning and without even having submitted any demands beforehand. It was Stalin, himself, who in attempting to explain the rapid German advances and to rally the Russian masses, admitted that the Nazis had surprised them by their sudden attack. In spite of constant warnings by foreign correspondents who saw the heavy German preparations on the Eastern Front only days before the offensive, and in spite of *specific* warnings by our own State Department, Stalin and Molotov issued the most vehement denials and accused the "pluto-democracies" of attempting to create a rift between the friendly powers, Russia and Germany. Broadcasts

from Moscow only the day before hostilities broke out reassured listeners that Russia thought such predictions of impending war were vicious rumors, and the commentator added that the streets were full of soldiers on leave. Granting even the most generous interpretation of Stalin's statements as being rationalizations for home consumptions, the question must still be asked, where was the Russian intelligence, the Secret Police and the vigilant border patrol defenses? Stalin, of course, committed a serious blunder in thinking that Hitler would present final, formal demands before striking. Stalin could hardly be considered a political innocent committed to strict legality, since he had before him a whole series of treaties and pacts broken by Hitler.

Secondly, as to the allegedly traitorous activities of Tukhachevsky and the other leading officers who were killed, it is impossible to discuss these, since, contrary to the Hollywood fable, "Mission to Moscow," these men were tried (if at all) in secret, and all that we know is what Stalin wants us to know. But one can draw certain conclusions from available facts and statements. By the admissions of the Russians themselves and their apologists, not only did the Soviets in Strong's phrase "expect it", but according to Max Werner and other pro-Soviet military commentators, in the summer of 1941 Russian material, both quantitatively and qualitatively, was equal to that of the Germans. The Russian were supposed to have had the edge on motorization, air-power, para-troops and manpower. Why, then, the early defeats? Is it not logical to assume that an army which had purged seventy-five per cent of its officers over the rank of colonel (officers who had achieved international reputation among military men for their accomplishments in the field of tactics and for their development of the Frunze School of Artillery) would suffer from a lack of leadership? Once again it was Stalin who, in explaining the early disasters, accused the military leadership of "complacency and frivolousness." Without technical knowledge in military affairs, one is in no position to evaluate either the Russian achievements or mistakes; that must be left to the experts. What seems incomprehensible to a layman is how a retreat which at the beginning of the war cost the Russians 30% of their wheat, 37% of their railroads, 50% of their coal, 60% of their pig-iron, 60% of their steel, and a sacrifice of 50 million Russians living in German occupied territory could be interpreted as a well-laid plan to move back to fortified positions. (The reader interested in purely military matters is referred to two articles written anonymously for *Foreign Affairs,* January and July, 1942, which point out in what way the Russian forced retreat differed from the famous Tukhachevsky "defense in depth".) What the Russians were doing was to take advantage of what has always been their traditional ally, space. From the standpoint of the Germans, advance meant the constant danger of overextended lines, since Hitler, in spite of the General Staff's warning, committed himself to the stupid task of annihilating the entire Red Army. German literature on military matters has been replete with warnings and dire predictions concerning the dangers inherent in the vast spaces of Russia which



have been described as "hopeless, enigmatic and double-faced." General Von Tempelhoff, the famous German military authority, expressed himself as follows, "If the Red masters are confident of their people, they can evade the victorious aggressor in order to annihilate him after he has crossed the climax of his victory."

Thirdly, what so many apologists of Russian resistance conveniently forget is what the earlier apologists for industrialization forgot, namely, the continuous aid which has poured in from the allies. Just as no account of Russia's industrial achievements which neglects the foreign contributions of technicians, engineers, tools, machinery, etc., can be complete, so no account of Russia's resistance and present offensive can be intelligible without a reference to the tremendous flow of military material, food, and medical supplies from the United States and England, not to mention the factor of the Allied military operations. The most formidable foe which the Germans still face is the productive capacity of Russia's allies.

Finally, let us examine the conditions existing at the beginning of the war within the Red Army, the relationship between it and certain civilian factors, and what has apparently taken place since that time. Contrary to what the apologists would like us to believe, the Nazi offensive did not find the Russian Army well prepared at all. Incidentally, it was not the signing of the Nazi-Soviet Pact which was responsible for the Russian military preparation. It was the lamentable showing of the Red Army during the Russo-Finnish War. The military campaigns revealed serious weaknesses in organization, discipline, co-ordination and transport, as is amply attested to by official Russian sources. John Scott and others report that there was mass apathy, bureaucratic mismanagement and general cynicism. It was only after a series of drastic military revisions that the war was brought to an end.

What actually happened in Russian military affairs when the Russo-German War began can best be inferred from a play which is the first drama ever to be published in Pravda, the official organ of the Communist Party. Such an event is not to be taken lightly, since any play published for mass consumption in a totalitarian country must have an importance which transcends the incidental interest of mere entertainment. The play, written by Andrei Koneichuk, Vice-Commissar of Foreign Affairs, is called "The Front." Its general intent is to make scapegoats of all those "negative heroes" responsible for the early defeats in the war, and to celebrate the new hero who is called a "positive" type. The play accomplishes the following objectives: it attacks those bureaucratic administrators and chiefs who sacrificed the quality of material demanded by the Army to quantity and speed-ups; it ridicules those conservative officers and executives who wear medals and only give orders, factory directors who boast of their "poor man's origin", and all "fools ignoramuses, sycophants, nincompoops and wheedlers" who should be "beaten bloody into a pulp". It recommends a purge of the

Army, especially of those who fought in the Civil Wars of the 20's and it applauds the drastic move of placing technicians and engineers in places of power.

These conclusions can be drawn from the play. It was necessary for the regime to "explain" to the masses the reasons for the apparent mismanagement on the home front as well as on the battleline. The suggested remedies of purging and liquidation indicate that they must have already been put into effect. Stalin and his associates in creating scapegoats for administrative errors are attempting to absolve themeselves from any responsibility, even though those men who are reviled in the play were not democratically elected but chosen, honored and decorated by Stalin himself. Stalin, as well as other close members of the ruling strata, are maneuvering their political positions so as to take advantage of what is evidently a new shift in the composition of various social classes. There is, of course, emphasis upon the importance of both the military youth and the technicians (both essential to the successful prosecution of the war), and upon the upper layers of the peasantry. Not only are there the continual national developments in directions diametrically opposed to those of the Bolshevik Revolution, but there are severely critical remarks directed against the Army Commissars; and at the same time there is also a catering to the large numbers of non-communist masses throughout the land. As far as the problem of mere military resistance is concerned, one is driven to the conclusion that was arrived at in discussing the factors of civilian morale, nationalism and religion.

It is clear from the facts presented that there must have been a very severe military crisis, just as there was a crisis on the home front, but that together with the important factors of almost inexhaustible manpower and precious vast spaces, there was time yet to tap the great military reserves of youthful initiative, resourcefulness and courage. The country was in a critical condition, and the government, the Party and officialdom had to depend on all those who dared, who possessed skill and inventiveness, and not upon those who were completely responsible for the catastrophic consequences of their own administration and leadership.

What needs to be stressed, therefore, is that what has been acclaimed in the resistance of the Russian masses derives not from those social and economic conditions which existed before the war, and which allegedly provided the elan and the fighting forces. On the contrary, the qualities, if one wants to call it qualities, manifested by the Russians, are not related to the type of regime under which they live, they are qualities which have been generated by the war itself.

*George Kimmelman*



# PRAGMATISM: THE LOGIC OF CAPITALISM

The purpose of this article is to amplify the details of our general position expressed in a previous issue,*) namely, the connection between Instrumentalist logic and the social economy of capitalism in America. We have already shown that there is not a mechanical relation between the economy and the logic but rather a dynamic, dialectical relationship in terms of social forces and the ideas generated by them under modern capitalism.

The history of America extends over a period of more than three hundred years, but we have selected only such particular phases as are pertinent to our inquiry, especially the period between the Civil War and World War I. It was during this epoch that Instrumentalist logic developed as America moved ahead to become one of the foremost capitalist powers of the world.

On the social side this entails the characteristics of American capitalism — its economy, its polity, its bourgeois democracy. On the logical side it involves a discussion of the work of four outstanding figures in the Pragmatist movement — *Charles S. Peirce,* the founder, *William James,* the psychologist, *John Dewey,* the educator, and *James Mark Baldwin,* the logician.

The years that saw the Puritans settle in America — the 1620's — were the very ones, it will be recalled, that brought a new kind of logic to modern England in the celebrated work of Francis Bacon, the self-styled "inductive logic" that has had a long subsequent history. Between 1620 and 1860 America built a republic based on an economy of expansion. It spread in a number of distinct regions: the industrial North, the plantation South, the Pioneering West. Vast multitudes of workers were drawn here to constitute the future laboring population. In due time, the problem of unification or nationality held the center of the stage. The Civil War made manifest the significance of the industrial North as the sovereign of American capitalism. The irresponsible conflict assumed the proportions of a kind of "second economic revolution."

We had no particular philosophy of our own until the Civil War. There were of course several different threads of philosophy prior to that, fragments of European philosophy. But whatever the origin of the frag-

*) *See: MARXISM AND PRAGMATISM. Vol. VI, No. 3, p. 23 to p. 26.*

ment — whether Kant or Hegel, Spencer, Comte, Transcendentalism or Positivism — the prevailing ideas were ordered to the system of Idealism.

It was only during the Reconstruction period following the Civil War that America began to hammer out its own philosophy. It was then that America began to assert itself as a country and a people of commerce and industry, of transportation, of exchange, of machinery and scientific appliances, all of which were the first bold precursors of our present-day "business civilization." The election of Ulysses S. Grant brought to a head several crises of an economic and political nature that made Reconstruction a much larger problem than merely that of the aftermath of civil strife. For one thing, there occurred during this time our first great industrial panic in spite of all the growth and prosperity of the nation. There was, indeed, an enormous development of manufactures at the time — a new source of exploitation in the oil fields of Ohio and Pennsylvania, in the gold and silver mines of the Far West — as well as the reorganization of currency, taxation and banking. All this aided the rapid growth of wealth and large fortunes.

Examining the politics that accompanied these changes, we find the imminent need for labor revealed in the euphemistic phrases of the Fifteenth Amendment that guaranteed "the right of citizens to vote . . . not denied on account of race, creed or color or previous condition of servitude." The country was under the domination of Grant's Republican Party, which found itself involved in extensive rebuilding. Simultaneously there was disclosed the beginning of serious contradictions in the entire system of capitalism.

Furthermore, Grant involved us in foreign relations as well. There were, for instance, our dealings with England, France and Russia. And the affair of Santo Domingo turned out to be an X-ray of the entire character of our American form of capitalism.

Far-reaching economic and industrial changes soon transformed the United States into a powerful enterprise of capitalism, wherein the machine showed itself as one of the great titans of the modern world. And while there were already sporadic movements, here and there, of working-class organizations, it remained for a later period to institute the socialist parties in America.

It became clear that there was need for unifying the people with respect to a system of ideas or principles of philosophy. The philosophy imported from across the seas no longer satisfied. All systems of Idealism were indigenous to the countries of Europe, as the latter sought to shed their feudalist residues in the face of bourgeois emancipation which was initiated by the French Revolution. What America needed was the fashioning of its own ideas, a new body of principles. Hence we find — in 1878 — the beginnings of a new philosophy, Pragmatism.



## II

It will be recalled that capitalism readily made use of science for its social objectives, chief of which were the exploitation of natural resources as well as of the workers operating them under wage-slavery. America developed its laboratories to fully utilize the physical sciences. In this sense, there was greater opportunity here to foster the experimental method in order to perfect the machinery of capitalist industry and production. Technological schools, for instance, came into prominence, as the field of science increased in usefulness to society. This, in turn, gave impetus toward research, so that we find many phases of theory provoked by industrial need. At the same time, there were evidences of even "pure" theory, as is always the case under these circumstances.

The major point is that science — physical science — engendered traits and habits in these laboratories, so that the time came when our American thinkers were obliged to recognize this phenomenon as they came to reflect on the larger significance of science.

In England Bacon had performed a similar function as he reflected on the beginnings of all modern science — physics in particular. He saw the larger, social meanings of the pioneers of mechanics — of Galileo in particular — as science revealed its possibilities as a social agency for power over the natural resources for the benefit of the rising bourgeois class. Knowledge was power in this earthly sense of commerce and trade, of wealth and domination. It was with this in mind that Bacon broke with the old logic of Aristotle as he attempted the inauguration of the new, "inductive" logic of the New Organon.

Similarly, the rise of Pragmatism in America found its impetus in the scientific laboratories as an ally of the social needs of American capitalism. Here we find the beginnings of still another phase of logic, namely that of the modern Instrumental logic of the pragmatists. For it was Charles S. Peirce who first suggested that the New World had need of a different logical approach. Forthwith he enunciated his famous principle, the Maxim of Peirce. Grounded in the physical sciences, he had come to the brilliant conclusion that the way of the laboratory might furnish the proper clue to a new approach to thinking and logic. Accordingly we find Peirce reducing his observations, experiences and reflections concerning manner and method of physical science to the following terms: "Consider what effects which might conceivably have practical bearings we conceive the object of our concept to have. Then our conception of these effects is the whole of our conception on the object."

Behind this statement is a new method of proceeding with the nature of concepts, or ideas, or notions. To realize the significance of this Maxim, we must briefly inquire into the logical methods of thinking prior to Pragmatism. So far as the traditional methods were concerned, the logic was the Formal Logic of Aristotle. An idea, or concept, was neatly set out in

terms of categories — precise, exact, perfect, immutable. Definition meant logical definition, which in turn entailed genus, species and differentiae — according to the set rules of the Aristotelian system. Everything was finished, ready-made, inflexible, just as every word had a single definition, and every concept was rendered in terms of the predictions of the subject by virtue of the notorious categories.

Such scholasticism prevailed all through feudal civilization and even beyond to assume sovereignty over all logic. But the rising tide of capitalism which co-existed with the science of the Renaissance introduced such a wealth of new physical facts about the terrestrial earth that it gradually became evident that formal logic was not at all efficacious for the new scientific pursuits. This was the background of Bacon's initial flourish toward induction, which was continued and deepened as capitalism in England steadily increased. Even before Peirce — by thirty-five years, in fact — Mill framed a series of new methods with which to probe nature's phenomena.

Peirce sought to break with formal logic in a new manner, namely, by a rule of logic, or maxim, designed to indicate how ideas may be expressed in terms of action rather than words; by results, rather than definitions; by consequences rather than speculation; in terms of function rather than form. An idea is "what conduct it is fitted to produce," as James later expressed it. Hence a concept is exhibited in results and consequences, under the test of experiment and experience.

The issue now resolves itself into noting the differences involved between 1) the maxim of Peirce and formal logic, and 2) the maxim of Peirce as the beginning of Pragmatism compared with the positivist logic of John Stuart Mill's type of induction. If formal logic represents the vestiges of feudal economy, primarily, Mill's contribution falls definitely within the shadow of modern capitalism and under the utilitarian economics of Mid-Victorian England. And if we are to grasp the basic social significance of Peirce's maxim of logic, it is necessary to understand the difference between Mill's inductive logic and that of American instrumentalist logic.

First, the definitions of traditional logic are formal. They are verbal statements descriptive of the predications about the subject, expressed in terms of categorical adjectives. For example, take the definition of the word "silver." It is a "metal that is lustrous." Here we observe that the syllogistic classifications hold, since the trait of "lustrousness" modifies or predicates the substance, the subject, "metal." In other words, it is a verbal categorization of the term to be defined. It follows, consistently, the metaphysics of being behind the definition, namely, the distinct "kinds" in nature.

Hence, when we say traditional logic's definitions are formal, we mean specifically that the one and only form is that of the subject-predicate nature. This is in keeping with the syllogism as the sole technique of the old logic.



The maxim of Peirce cannot be fitted into these techniques because it does not concern itself with predicates, adjectives and categorical traits. Instead, it deals with testing, experimenting, working-out, deeds, results and consequences — that is, with "pragma," the Greek word for "action."

For instance, the concept of "hardness" is arrived at through actual manipulation with "hard" objects, with physical materials—wood, iron, stone, gold — all of which are subjected to laboratory testing and experience. "Hardness" is what hardness does, in actual fact, physically, materially, consequentially. The differences of the two methods, the old and the new, are so glaring that we find Peirce's maxim eventually laying the basis for a new logic, that of the Instrumentalist type.

Although the England of Mill was likewise one of industrial capitalism, and although there was a patent need for thinking along new lines, such as the inductive logic he sponsored, the point to bear in mind was his positivism, or associationist psychology. The latter impelled Mill to view concepts in terms of particulars, sensations, facts, data, brought together by a unifying name, or abstraction. In this sense, Mill's celebrated methods of research were committed to a preconceived uniformity in nature, along the lines of mechanical causality: His view is best expressed in this statement: "The conceptions then which we employ for the colligation and methodization of facts . . . are never obtained otherwise than by way of comparison and abstraction, and, . . in most cases are evolved by abstraction from the very phenomena it is their office to colligate."

In so far as they adhere to the capitalistic outlook on science, Mill's views are consistent with the general empirical tendency, to be sure. But, as distinguished from Peirce's maxim, they do not stress the meanings of immediate testing, nor of the specific function of experimentation. Causality as mechanical is the strict determinism of Comtean positivism. Peirce could not accept these attitudes, since, as we know, he sponsored the notion of novelty, even chance, and particularly of pragmatic purposiveness. Thus the advance from Mill to Peirce was from positivism to pragmatism, as America came to assume a larger social meaning in the capitalism of modern times.

Still another phase of Peirce's maxim must be included, if we are to appreciate properly the opening note of the new philosophy of Pragmatism in America. We refer to the fact that Peirce showed how his maxim might render "ideas clear." And since this leads to the important modern movement of semantics, in which meaning becomes more central than definition, we shall say a few words about the problem of clarification of ideas.

A concept, in this view, is functional and experimental: it is neither absolute nor universal nor rationalist. It follows, then, that the logic of inquiry makes use of concepts or ideas as providing meanings. And these meanings are valuable for the pragmatic functioning of ideas or concepts

in specific situations where they serve operatively. The maxim, therefore, was not designed to render concepts amenable to the neat precision of being fitted into a system of logic, nor into a preordained system of principles. That is why the whole enterprise of logic becomes decidedly one of an experimental nature. The concepts are for use and functions in situations under the "irritation" of doubt and indeterminateness. They have a duty to perform, a service to render. And hence the maxim stresses clarity of meanings by virtue of the office and function of the consequences brought about. It is clarity of meaning through action and behavior rather than that of the traditional methods of exactness and perfection made possible, presumably, by consistent adherence to an ordered system of logic.

## III

The development of capitalism in America, since the initial years of Peirce's maxim of Pragmatism (1878), gives us the apposite social background of the next steps in the progress of philosophy. This history includes the enormous growth of cities, the assimilation of the West within the larger fold of industry, agriculture and ideology, the rising tide of tariff reforms, foreign entanglements and above all, the drift toward imperialism with its contradictory opposite of working-class socialism.

The shift from Republican to Democratic administrations,— from Grant to Cleveland, for instance, merely indicated that neither of the ruling parties of capitalism could solve the inner contradictions of the prevailing economy. And in so far as any particular region of the country stood out — economically and politically — it was the West that impressed its influence on the nation, up to the time of the "passing of the frontier." But even these influences — of Chicago and St. Louis in particular — did not affect the formative influences of the new philosophy, inaugurated by Peirce, with his New England background. Thus, the Hegelian forces about William T. Harris and his St. Louis contingent were too feeble to hold back the stream of Pragmatism. In fact, the basic economic forces of the class-struggle played into the hands of the latter. This explains the connection between Pragmatism and the kind of democracy most strikingly represented in America by Western social conditions and ideology.

Far-reaching changes occurred between the 80's and the dawn of the present century when William James appeared to continue the work of his fellow-thinker. Primarily, on the economic front, the country manifested a decided shift in which the urban population far surpassed the rural and manufacture and the production of machines soon outstripped agricultural production. The forces of railroad building and manufacture, begun just after the Civil War, now literally burst into such feverish activity that the entire country quickened to the meaning of wealth and prosperity. And here, too, another panic must not be overlooked — that of 1893.



As the population grew and the industry thrived, the whole capitalist machine became geared to the almost boundless expansion of capital and markets. It was just about then that America first launched its business expansion beyond its own borders — that is became more and more involved in affairs of an imperialist nature. Thus, in 1898, we annexed the Hawaiian Islands. Simultaneously, we entered a war on Spain, which resulted in new gains including Puerto Rica, the Phillippines, and Guam. The Samoan Islands followed, as more and more the Pacific was brought into the arena, not forgetting the "open door" which looked in upon the markets of China. A new world was opened to us as we exploited our benevolent interests in Latin-America, Nicaragua, Costa Rica, Cuba, and the like.

It was no mere accident that the very same year of our imperialist innovations, 1898, found William James in California, where he delivered his famous lecture that once again repeated the pragmatic message of the new philosophy. For it was in this very discussion that James strikingly presented the larger meanings of the maxim of Peirce, as he demonstrated the import of the Pragmatism he sponsored. It will be recalled that James had started his career as a doctor of medicine teaching physiology at Harvard. It was but a short step to the new psychology geared to the findings of Darwinian biology. Here then was the proper tie-up between science and philosophy to meet the demands of industrial, imperialist America.

The logical rule of the maxim of Peirce, the initial spurt toward Pragmatism, James fruitfully expanded and welded with the new, functional psychology based on Darwinian evolution. Once again we note that the residues of Mill's positivism, his strictly mechanical causality were eliminated as evolutionary psychology came to replace the utilitarian associationism of England. This turn of events in the field of ideas is important on two grounds: 1) it showed that capitalism could no longer retain the old mechanism in science, 2) it showed that with the upward curve of prosperity and success, capitalism had to ingest the meanings of change and evolution — up to a point.

The connection between psychology and Pragmatism — the distinctive contribution of James — marks one of the most significant contributions of American thinking. In the Old World formal logic had been mated with the kind of psychology that aided the retention of formalism in thinking. The marked change brought about by the new biology, Darwinism, found its true ally in the functional psychology of the pragmatic movement. Thus it is that logic itself formerly addicted to the ways of theology and metaphysics found a new lease on life on the American continent, as its apologists drove logic forward with new psychological and scientific implementations.

It has often been said that James was not interested at all in logic, that he was, in fact, anti-logical. There is a sense in which this is true, for he was primarily devoted to the battle against vicious intellectualism,

the spearhead of which had always been formal logic. However, the story has yet another aspect. It is worth mentioning because of its direct connection with the Instrumentalist logic of pragmatism. James was very much interested, indeed, in our processes of reasoning. As a psychologist and educator he was devoted to research in this field. But what he was really after was a method of using reason and our reasoning processes directly in the service of human purposes. Hence his stress upon the functional, the biological, the telic human scene. His objections to the old logic lay just here: for he argued that it had had no earthly connection with our direct, human problems, and hence it deserved in this sense to be discarded as useless.

James fought against those very props upon which the old logic was based. He argued against forms and essences and absolutes and ready-made formulae, all of which were outmoded in the light of the new world about us. That he utilized psychology instead of basic, economic foundations was the result of his close ties with the class in control. Consequently, he sponsored the notions of change and process, of transformation and evolution, of dynamism and reconstruction only in so far as his class limitations permitted. Within the scope of these limitations, he made a brilliant contribution to our store of ideas, particularly since he advanced the attitude to ideas in terms of biologic, evolutionary, functional purposes.

In this connection, we can recommend no better text for the proper understanding of Pragmatism than James' two classic volumes, entitled, "Principles of Psychology," first published in 1898. Here we find doctrines set forth — particularly as they are related to the various phases of human experience — of great psychological value. On the positive side, these volumes are an outstanding contribution to the logical phase of this philosophy; their limitations lie in the omissions common to all thinking of this school, namely, the failure to cope with the economic fundamentals underlying the entire ideology.

## IV

Thus far, then, we have the contributions of two of the pioneers in Pragmatism: 1) Peirce, the founder, with his maxim capable of logical application, and expressed in terms of the method of "making ideas clear" by experimentally observing their workings; and 2) the functional psychology of James as he brought the meaning of Darwinian evolution to the field of ideas as directly teleological, purposive, functional and instrumental for human needs.

This brings us to the events that led up to World War I. Against this latter background, we shall discuss the contribution of John Dewey and James Mark Baldwin, centering our attention particularly on Instrumentalist logic.



We have already mentioned that with all the apparent national prosperity, there were still obvious symptoms of contradiction in the economy, as, for instance, the panics of 1837 and 1873. The historians who try to minimize these crises proceed on the assumption that a panic is nothing but a stress and strain in gold or silver, as if that were the whole story. Actually panics reveal rather flagrantly the inner nature of the type of social economy. In every instance, they are symptomatic of crisis, grounded and rooted as they are in economic and class contradictions. Under the Roosevelt administration, at the turn of the present century, the President had his hands full with many problems inherent in the contradictions. There were not only the issues of trustification, railway regulation, another panic, foreign relations, the Japanese question, the Phillippines, but also the greater problems of labor — the A.F. of L. and eventually the Socialist Party of America. All these issues could not be shrugged away as being atomic incidents existing in a void. They were, rather, evidences of a social continuum brought about by the brute facts of the failure of the economic system of capitalism, even under the auspices of growth and expansion.

In the face of these critical conditions, it is obvious that the philosophy of Pragmatism had to strengthen its hold the better to cope with patent evidences of disintegration. The logic of Pragmatism took on a sterner front in the work of John Dewey who realized more than either James or Peirce that somehow of other there were dangerous rifts in the society about us. How was he to proceed? Where should he begin? For in all the voluminous literature that came from Dewey's pen there were always significant phrases about "trouble", "predicament", "precariousness", "indeterminate situation" and "problem." These were the key-words of his idiom, even though he could not, or would not, get to the bottom of the irreconcilable economic contradictions underlying them.

Dewey was, above all, an educator, interested in the welfare of the young in the society which they would eventually meet face to face. Education, therefore, meant nothing but ways of experience in the natural and social world at hand. A strong strain of naturalism permeates Dewey's essays. At the same time, he was dedicated to two chief aims of education in America: 1) to grant the child its own experiential autonomy, and 2) to improve our methods of thinking. On the one score Dewey advanced his particular revision of pragmatic logic in the direction of Instrumentalism, making use of the maxim of Peirce along with the functional psychology of James. On the other he promulgated his views of Democracy in Education.

Instrumentalist logic may best be viewed in the light of Dewey's initial essays — published in 1903 — under the title "Studies in Logical Theory." This symposium volume contained articles on the pragmatic outlook by several writers, Dewey being the editor and author of the first four essays. Other contributors were Thompson, McLennan, Ashley, Gore, Heidel, Stuart, and Moore.