THE UNANTICIPATED CONSEQUENCES OF PURPOSIVE SOCIAL ACTION

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I

IN SOME ONE of its numerous forms, the problem of the unanticipated consequences of purposive action has been treated by virtually every substantial contributor to the long history of social thought.[1] The diversity of context[2] and variety of terms[3] by which this problem has been known, however, have tended to obscure the definite continuity in its consideration. In fact, this diversity of context—ranging from theology to technology—has been so pronounced that not only has the substantial identity of the problem been overlooked, but no systematic, scientific analysis of it has as yet been effected. The failure to subject this problem to such thorough-going investigation has perhaps been due in part to its having been linked historically with transcendental and ethical considerations. Obviously, the ready solution provided by ascribing uncontemplated consequences of action to the inscrutable will of God or Providence or Fate precludes, in the mind of the believer, any need for scientific analysis. Whatever the actual reasons, the fact remains that though the process has been widely recognized and its importance equally appreciated, it still awaits a systematic treatment.

Although the phrase, unanticipated consequences of purposive social action, is in a measure self-explanatory, the setting of the prob-

[1] Some of the modern theorists, though their contributions are by no means of equal importance, are: Machiavelli, Vico, Adam Smith (and some later classical economists), Marx, Engels, Wundt, Pareto, Max Weber, Graham Wallas, Cooley, Sorokin, Gini, Chapin, von Schelting.

[2] This problem has been related to such heterogeneous subjects as: the problem of evil (theodicy), moral responsibility, free will, predestination, deism, teleology, fatalism, logical, illogical and non-logical behavior, social prediction, planning and control, social cycles, the pleasure- and reality principles and historical "accidents."

[3] Some of the terms by which the whole or certain aspects of this process have been known are: Providence (immanent or transcendental), Moira, *Paradoxie der Folgen*, *Schicksal*, social forces, heterogony of ends, immanent causation, dialectical movement, principle of emergence and creative synthesis. The present writer hopes to devote a monograph now in preparation to the history and analysis of this problem. The vast scope and manifold implications of the problem necessitate my being elliptical at times in the present brief exposition. For the same reason of limitation of space, I have had to eliminate most of the concrete material upon which the discussion is based.

lem demands further specification. In the first place, the greater part of this paper deals with isolated purposive acts rather than with their integration into a coherent system of action (though some reference will be made to the latter). This limitation is prescribed by expediency, for a treatment of systems of action would introduce further complications. Furthermore, *unforeseen* consequences should not be identified with consequences which are necessarily undesirable (from the standpoint of the actor). For though these results are unintended, they are not upon their occurrence always deemed axiologically negative. In short, undesired effects are not always undesirable effects. The intended and anticipated outcomes of purposive action, however, are always, in the very nature of the case, relatively desirable to the actor, though they may seem axiologically negative to an outside observer. This is true even in the polar instance where the intended result is "the lesser of two evils" or in such cases as suicide, ascetic mortification and self torture which, in given situations, are deemed desirable relative to other possible alternatives.

Rigorously speaking, the *consequences* of purposive action are limited to those elements in the resulting situation which are exclusively the outcome of the action, i.e., those elements which would not have occurred had the action not taken place. Concretely, however, the consequences result from the interplay of the action and the objective situation, the conditions of action.[4] We will be primarily concerned with the sum-total results of action under certain conditions. This still involves the problem of causal imputation (of which more later) though to be a less pressing degree than consequences in the rigorous sense. These sum-total or concrete consequences may be differentiated into (a) consequences to the actor (s), (b) consequences to other persons mediated through (1) the social structure, (2) the culture and (3) the civilization.[5]

In considering *purposive* action, we are concerned with "conduct" as distinct from "behavior," that is, with action which involves motives and consequently a choice between various alternatives.[6] For

[4] Cf. Frank H. Knight, *Risk, Uncertainty and Profit*, Boston and New York, Houghton Mifflin Co., 1921, pp. 201–2. Professor Knight's doctoral dissertation represents by far the most searching treatment of certain phases of this problem that I have yet seen.

[5] For the distinction between society, culture and civilization, see Alfred Weber, "Prinzipielles zur Kultursoziologie: Gesellschaftsprozess, Civilisationsprozess und Kulturbewegung," *Archiv für Sozialwissenschaft und Sozialpolitik*, 47, 1920, 1–49; R. K. Merton, "Civilization and Culture," *Sociology and Social Research* 21, 1936, 103–113. (Cf. foregoing article, definition 19. Ed.)

[6] Knight, *op. cit.*, p. 52.

the time being, we will take purposes as given, so that any theories which "reduce" purpose to conditioned reflexes or tropisms, which assert that motives are simply compounded of instinctual drives and the experiential shaping of these drives, may be considered as irrelevant. Psychological considerations of the source or origin of motives, though they are undoubtedly important for a more complete understanding of the mechanisms involved in the development of unexpected consequences of conduct, will thus be ignored.

Moreover, it is not assumed that in fact social action always involves clear-cut, explicit purpose. It may well be that such awareness of purpose is unusual, that the aim of action is more often than not nebulous and hazy. This is certainly the case with habitual action which, though it may originally have been induced by conscious purpose, is characteristically performed without such awareness. The significance of such habitual action will be discussed later.

Above all, it must not be inferred that purposive action implies "rationality" of human action (that persons always use the objectively most adequate means for the attainment of their end).[7] In fact, part of the present analysis is devoted to the determination of those elements which account for concrete deviations from rationality of action. Moreover, rationality and irrationality are not to be identified with the success and failure of action, respectively. For in a situation where the number of *possible* actions for attaining a given end is severely limited, one acts rationally by selecting the means which, on the basis of the available evidence, has the greatest probability of attaining this goal and yet the goal may actually *not* be attained.[8] Contrariwise, an end may be attained by action which, on the basis of the knowledge available to the actor, is irrational (as in the case of "hunches").

Turning now to *action*, we may differentiate this into two types: (a) unorganized and (b) formally organized. The first refers to actions of individuals considered distributively out of which may grow the second when like-minded individuals form an association in order to achieve a common purpose. Unanticipated consequences may, of course, follow both types of action, though the second type would seem to afford a better opportunity for sociological analysis since the very process of formal organization ordinarily involves an explicit statement of purpose and procedure.

[7] Max Weber, *Wirtschaft und Gesellschaft*, Tübingen, J. C. B. Mohr, 1925, pp. 3 ff.

[8] See J. Bertrand, *Calcul des probabilités*, Paris, 1889, pp. 90 ff.; J. M. Keynes, *A Treatise on Probability*, London, The Macmillan Co., 1921, Chap. XXVI.

Before turning to the actual analysis of the problem it is advisable to indicate two methodological pitfalls which are, moreover, common to all sociological investigations of purposive action. The first involves the problem of causal imputation, the problem of ascertaining the extent to which "consequences" may justifiably be attributed to certain actions. For example, to what extent has the recent increase in economic production in this country been due to governmental measures? To what extent may the spread of organized crime be attributed to prohibition? This ever-present difficulty of causal imputation must be solved for every empirical case which is studied.

The second problem is that of ascertaining the actual purposes of a given action. There is the difficulty, for instance, of discriminating between rationalization and truth in those cases where apparently unintended consequences are *post facto* declared to have been intended.[9] Rationalizations may occur in connection with nation-wide social planning just as in the classical instance of the horseman who, on being thrown from his steed, declared that he was "simply dismounting." This difficulty, though not completely obviated, is significantly reduced in cases of organized group action since the circumstance of organized action customarily demands explicit (though not always "true") statements of goal and procedure. Furthermore, it is easily possible to exaggerate this difficulty since in many, if indeed not in most, cases, the observer's own experience and knowledge of the situation enables him to arrive at a ready solution. Ultimately, the final test is this: does the juxtaposition of the overt action, our general knowledge of the actor(s) and the specific situation and the inferred or avowed purpose "make sense," is there between these, as Weber puts it, a "verständliche Sinnzusammenhang?" If the analyst self-consciously subjects these elements to such probing, there is substantial probability that his conclusion in respect to purpose is not too far afield in the majority of instances. The evidence available will vary in different cases and the probable error of the imputation of purpose will likewise vary.

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[9] This introduces the problem of "chance," which will be treated in another connection. It should be realized that the aim of an action and the circumstances which actually ensue may coincide without the latter being a consequence of the action. Moreover, the longer the interval of time between the action and the circumstances in view, the greater the probability (in the absence of contrary evidence) that these circumstances have happened "by chance." Lastly, if this interval is greatly extended, the probability that the desired circumstances will occur fortuitously may increase until virtually the point of certainty. This reasoning is perhaps applicable to the case of governmental action "restoring prosperity." Compare V. Pareto, *Traité de sociologie générale*, Paris, Payot, 1917, II, par. 1977.

It must be freely admitted at this junction that these problems have not been further treated in the ensuing discussion, but despite the absence of any further explicit treatment, the limitations set by these methodological difficulties are implicitly recognized throughout.

Lastly, it may be urged that a frequent source of misunderstanding will be eliminated at the outset if it is realized that the factors involved in unanticipated consequences are—precisely, factors, and that none of these serves by itself to explain any concrete case.

II

The most obvious limitation to a correct anticipation of consequences of action is provided by the existing state of knowledge. The extent of this limitation may be best appreciated by assuming the simplest case where this lack of adequate knowledge is the *sole* barrier to a correct anticipation.[10] Obviously, a very large number of concrete reasons for inadequate knowledge may be found, but it is also possible to summarize several classes of factors which are most important.

The first class derives from the type of knowledge—usually, perhaps exclusively—attained in the sciences of human behavior. Properly speaking, the social scientist almost invariably finds stochastic (conjectural) associations and not, as in most fields of the physical sciences, functional associations.[11] This is to say, in the study of human behavior, there is found a set of different values of one variable associated with each value of the other variable(s), or in less formal language, the set of consequences of any repeated act is not

[10] Most previous discussions of unanticipated consequences limit the explanation of unanticipated consequences to this one factor of ignorance. Such a view either reduces itself to a sheer tautology or exaggerates the rôle of but one of many factors. In the first instance, the argument runs in this fashion: "if we had only known enough, we could have anticipated the consequences which, as it happens, were unforeseen." The apparent fallacy in this *post mortem* argument rests in the word "enough" which is implicitly taken to mean "enough knowledge to foresee" the consequences of our action. It is then no difficult matter to uphold the contention which then reads in effect: "if we had known, we would have known." This viewpoint is basic to several schools of educational theory, just as it was to Comte's dictum, *savoir pour prevoir, prevoir pour pouvoir*. This intellectualist stand has gained credence partly because of its implicit optimism and because of the indubitable fact that sheer ignorance does actually account for the occurrence of some unforeseen consequences *in some cases*.

[11] Cf. A. A. Tschuprow, *Grundbegriffe und Grundprobleme der Korrelationstheorie*, Leipzig, B. G. Teubner, 1925, pp. 20 ff., where he introduces the term "stochastic." It is apparent, of course, that stochastic associations are obtained because we have not ascertained, or having ascertained, have not controlled the other variables in the situation which influence the final result. Thus, stochastic associations are not inherent in social knowledge but derive from our present lack of experimental control.

constant but there is a range of consequences, *any one of which may follow the act in any given case.* In some instances, we may have sufficient knowledge of the limits of the range of possible consequences, and even adequate knowledge for ascertaining the statistical (empirical) probabilities of the various possible sets of consequences, but it is impossible to predict with certainty the results in any particular case. Our classifications of acts and situations never involve completely homogeneous categories nor even categories whose approximate degree of homogeneity is sufficient for the prediction of particular events.[12] We have here the paradox that whereas past experience[13] is the sole guide to our expectations on the assumption that certain past, present and future acts are sufficiently alike to be grouped in the same category, these experiences are in fact different. To the extent that these differences are pertinent to the outcome of the action and appropriate corrections for these differences are not adopted, the actual results will differ from the expected. As Poincaré has put it, " . . . small differences in the initial conditions produce very great ones in the final phenomena. . . . Prediction becomes impossible, and we have the fortuitous phenomenon."[14]

However, deviations from the usual consequences of an act may be anticipated by the actor who recognizes in the given situation some differences from previous similar situations. But, insofar as these differences can themselves not be subsumed under general rules, the direction and extent of these deviations cannot be anticipated.[15] It is clear, then, that the partial knowledge in the light of which action is commonly carried on permits a varying range of unexpected outcomes of conduct.

Although no formula for the exact *amount* of knowledge necessary for foreknowledge is presented, one may say in general that consequences are fortuitous when an exact knowledge of many details and facts (as distinct from general principles) is needed for even a highly approximate prediction. In other words, "chance conse-

[12] A classification into completely homogeneous categories would, of course, lead to functional associations and would hence permit of perfectly successful prediction, but the aspects of social action which are of practical importance are too varied and numerous to permit such homogeneous classification.

[13] *A priori* calculations of probability are manifestly irrelevant to specific social acts.

[14] Henri Poincaré, *Calcul des probabilités*, Paris, 1912, p. 2.

[15] The actor's awareness of his ignorance and its implications is perhaps most acute in the type of conduct which Thomas and Znaniecki attribute to the wish for "new experience." This is the case where unforeseen consequences actually constitute the purpose of action, but there is always the tacit assumption that these consequences will be desirable. The nebulous purpose in this class of action is satisfaction.

quences" are those which are occasioned by the interplay of forces and circumstances which are so complex and numerous that prediction of them is quite beyond our reach. This area of consequences should perhaps be distinguished from that of "ignorance," since it is related not to the knowledge actually in hand but to certain knowledge which can conceivably be obtained.[16]

The importance of ignorance as a factor is enhanced by the fact that the exigencies of practical life frequently compel us to act with some confidence even though it is manifest that the information on which we base our action is not complete. We usually act, as Knight has properly observed, not on the basis of scientific knowledge, but opinion and estimate. Thus, situations which demand (or what is for our purposes tantamount to the same thing, appear to the actor to demand) immediate action of some sort, will usually involve ignorance of certain aspects of the situation and will bring about unexpected results.

Moreover, even when immediate action is not exacted, there is the *economic* problem of distributing our fundamental resources, time and energy. Time and energy are scarce means and economic behavior is concerned with the rational allocation of these means among alternative wants, only one of which is the anticipation of consequences of action.[17] In our present economic order, it is manifestly uneconomic behavior to concern ourselves with attempts to obtain knowledge for predicting the outcomes of action to such an extent that we have practically no time or energy for other pursuits. An economy of social engineers is no more conceivable or practicable than an economy of laundrymen. It is the fault of the extreme anti-noetic activists who promote the idea of action above all else to exaggerate this limit and to claim (in effect) that virtually no time or energy be devoted to the acquisition of knowledge. On the other hand, the grain of truth in the anti-intellectualist position is, as was just observed, that there are not only decided economic limits to the

[16] Cf. Keynes, *op. cit.*, p. 295. This distinction corresponds to that made by Keynes between "subjective chance" (broadly, ignorance) and "objective chance" (where even additional wide knowledge of general principles would not suffice for foreseeing the consequences of a particular act). Much the same distinction appears in the works of Poincaré and Venn, among others.

[17] Cf. Knight, *op. cit.*, p. 348. The reasoning is also applicable to cases where the occupation of certain individuals (e.g., social engineers and scientists) is devoted solely to such efforts, since then it is simply a question of the distribution of the resources of society. Furthermore, there is the practical problem of the communicability of knowledge so obtained, since it may be of a very complex order and the effort of persons other than social engineers to assimilate such knowledge leads us back to the same problem of distribution of our resources.

advisability of not acting until all or as much as possible uncertainty is eliminated, but also psychological limits since excessive "forethought" of this kind precludes any action at all.

A second major factor of unexpected consequences of conduct, which is perhaps as pervasive as ignorance, is error. Error may intrude itself, of course, in any phase of purposive action: we may err in our appraisal of the present situation, in our inference from this to the future objective situation, in our selection of a course of action, or finally in the execution of the action chosen. A common fallacy is frequently involved in the too-ready assumption that actions which have in the past led to the desired outcome will continue to do so. This assumption is often fixed in the mechanism of habit and it there finds pragmatic justification, for habitual action does in fact often, even usually, meet with success. But precisely because habit is a mode of activity which has previously led to the attainment of certain ends, it tends to become automatic and undeliberative through continued repetition so that the actor fails to recognize that procedures which have been successful *in certain circumstances* need not be so *under any and all conditions*.[18] Just as rigidities in social organization often balk and block the satisfaction of new wants, so rigidities in individual behavior may block the satisfaction of old wants in a changing social environment.

Error may also be involved in instances where the actor attends to only one or some of the pertinent aspects of the situation which influence the outcome of the action. This may range from the case of simple neglect (lack of systematic thoroughness in examining the situation) to pathological obsession where there is a determined refusal or inability to consider certain elements of the problem. This last type has been extensively dealt with in the psychiatric literature. In cases of wish-fulfilment, emotional involvements lead to a distortion of the objective situation and of the probable future course of events; such action predicated upon "imaginary" conditions must inevitably evoke unexpected consequences.

The third general type of factor, the "imperious immediacy of interest," refers to instances where the actor's paramount concern with the foreseen immediate consequences excludes the consideration of further or other consequences of the same act. The most prom-

[18] Similar fallacies in the field of thought have been variously designated as "the philosophical fallacy" (Dewey), the "principle of limits" (Sorokin, Bridgman) and, with a somewhat different emphasis, "the fallacy of misplaced concreteness" (Whitehead).

inent elements in such immediacy of interest may range from physiological needs to basic cultural values. Thus, Vico's imaginative example of the "origin of the family" which derived from the practice of men carrying their mates into caves to satisfy their sex drive out of the sight of God might serve as a somewhat fantastic illustration of the first. The doctrine of classical economics according to which the individual endeavoring to employ his capital where most profitable to him and thus tending to render the annual revenue of society as great as possible is, to quote Adam Smith, led "by an invisible hand to promote an end which was no part of his intention," may serve as an example of economic interest leading to this sequence.

However, after the acute analysis by Max Weber, it goes without saying that action motivated by interest is not antithetical to an exhaustive investigation of the conditions and means of successful action. On the contrary, it would seem that interest, if it is to be satisfied, demands such objective analysis of situation and instrumentality, as is assumed to be characteristic of *hominis oeconomici*. But it is equally undeniable that intense interest does in fact often tend to preclude such analysis precisely because strong concern with the satisfaction of the immediate interest is a psychological generator of emotional bias, with consequent lopsidedness or failure to engage in the required calculations. It is as much a fallacious assumption to hold that interested action in fact necessarily entails a rational calculation of the elements in the situation[19] as to deny rationality any and all influence over such conduct. Moreover, action in which this element of immediacy of interest is involved may be rational in terms of the values basic to that interest but irrational in terms of the life organization of the individual. Rational, in the sense that it is an action which may be expected to lead to the attainment of the specific goal; irrational, in the sense that it may defeat the pursuit or attainment of other values which are not, at the moment, paramount but which none the less form an integral part of the individual's scale of values. Thus, precisely because a particular action is not carried out in a psychological or social vacuum, its effects will ramify into other spheres of value and interest. For example, the practice of birth control for "economic reasons" influences the age-compo-

[19] This assumption is tenable only in a normative sense. It is indubitable that such calculation, within the limits specified in our previous discussion, *should* be made if the probability of satisfying the interest is to be at a maximum. The error lies in confusing norm with actuality.

sition and size of sibships with profound consequences of a psychological and social character.

Superficially similar to the factor of immediacy of interest, but differing from it in a highly significant theoretical sense, is that of basic values. This refers to instances where there is no consideration of further consequences because of the felt necessity of certain action enjoined by certain fundamental values. The classical analysis of the influence of this factor is Weber's study of the Protestant ethic and the spirit of capitalism. He has properly generalized this case, saying that active asceticism paradoxically leads to its own decline through the accumulation of wealth and possessions entailed by decreased consumption and intense productive activity.

This process contributes much to the dynamic of social and cultural change, as has been recognized with varying degrees of accuracy and cogency, by Hegel, Marx, Wundt and many others. The empirical observation is incontestable: activities oriented toward certain values release processes which so react as to change the very scale of values which precipitated them. This process may in part be due to the fact that when a system of basic values enjoins certain *specific* actions, adherents are not concerned with the objective consequences of these actions but only with the subjective satisfaction of duty well performed. Or, action in accordance with a dominant set of values tends to be focussed upon that particular value-area. But with the complex interaction which constitutes society, action ramifies, its consequences are not restricted to the specific area in which they were initially intended to center, they occur in interrelated fields explicitly ignored at the time of action. Yet it is because these fields are in fact interrelated that the further consequences in adjacent areas tend to *react* upon the fundamental value-system. It is this usually unlooked-for reaction which constitutes a most important element in the process of secularization, of the transformation or breakdown of basic value-systems. Here is the essential paradox of social action—the "realization" of values may lead to their renunciation. We may paraphrase Goethe and speak of "Die Kraft, die stets das Gute will, und stets das Böse schafft."

There is one other circumstance, peculiar to human conduct, which stands in the way of successful social prediction and planning. Public predictions of future social developments are frequently not sustained precisely because the prediction has become a new element in the concrete situation, thus tending to change the initial course

of developments. This is not true of prediction in fields which do not pertain to human conduct. Thus, the prediction of the return of Halley's comet does not in any way influence the orbit of that comet; but, to take a concrete social example, Marx's prediction of the progressive concentration of wealth and increasing misery of the masses did influence the very process predicted. For at least one of the consequences of socialist preaching in the nineteenth century was the spread of organization of labor, which, made conscious of its unfavorable bargaining position in cases of individual contract, organized to enjoy the advantages of collective bargaining, thus slowing up, if not eliminating, the developments which Marx had predicted.[20]

Thus, to the extent that the predictions of social scientists are made public and action proceeds with full cognizance of these predictions, the "other-things-being-equal" condition tacitly assumed in all forecasting is not fulfilled. Other things will not be equal just because the scientist has introduced a new "other thing"— his prediction. This contingency may often account for social movements developing in utterly unanticipated directions and it hence assumes considerable importance for social planning.

The foregoing discussion represents no more than the briefest exposition of the major elements involved in one fundamental social process. It would take us too far afield, and certainly beyond the compass of this paper, to examine exhaustively the implications of this analysis for social prediction, control and planning. We may maintain, however, even at this preliminary juncture, that no blanket statement categorically affirming or denying the practical feasibility of *all* social planning is warranted. Before we may indulge in such generalizations, we must examine and classify the *types* of social action and organization with reference to the elements here discussed and then refer our generalizations to these essentially different types. If the present analysis has served to set the problem, if only in its most paramount aspects, and to direct attention toward the need for a systematic and objective study of the elements involved in the development of unanticipated consequences of purposive social action, the treatment of which has for much too long been consigned to the realm of theology and speculative philosophy, then it has achieved its avowed purpose.

[20] Corrado Gini, *Prime linee di patologia economica*, Milan, A. Giuffrè, 1935, pp. 72–75. John Venn uses the picturesque term "suicidal prophecies" to refer to this process and properly observes that it represents a class of considerations which have been much neglected by the various sciences of human conduct. See his *Logic of Chance*, London, 1888, pp. 225–6.