

## V. TIME

### 1. Time as a Praxeological Factor

**T**HE notion of change implies the notion of temporal sequence. A rigid, eternally immutable universe would be out of time, but it would be dead. The concepts of change and of time are inseparably linked together. Action aims at change and is therefore in the temporal order. Human reason is even incapable of conceiving the ideas of timeless existence and of timeless action.

He who acts distinguishes between the time before the action, the time absorbed by the action, and the time after the action has been finished. He cannot be neutral with regard to the lapse of time.

Logic and mathematics deal with an ideal system of thought. The relations and implications of their system are coexistent and interdependent. We may say as well that they are synchronous or that they are out of time. A perfect mind could grasp them all in one thought. Man's inability to accomplish this makes thinking itself an action, proceeding step by step from the less satisfactory state of insufficient cognition to the more satisfactory state of better insight. But the temporal order in which knowledge is acquired must not be confused with the logical simultaneity of all parts of an aprioristic deductive system. Within such a system the notions of anteriority and consequence are metaphorical only. They do not refer to the system, but to our action in grasping it. The system itself implies neither the category of time nor that of causality. There is functional correspondence between elements, but there is neither cause nor effect.

What distinguishes epistemologically the praxeological system from the logical system is precisely that it implies the categories both of time and of causality. The praxeological system too is aprioristic and deductive. As a system it is out of time. But change is one of its elements. The notions of sooner and later and of cause and effect are among its constituents. Anteriority and consequence are essential concepts of praxeological reasoning. So is the irreversibility of events. In the frame of the praxeological system any reference to functional correspondence is no less metaphorical and misleading than is the

reference to anteriority and consequence in the frame of the logical system.<sup>1</sup>

## 2. Past, Present, and Future

It is acting that provides man with the notion of time and makes him aware of the flux of time. The idea of time is a praxeological category.

Action is always directed toward the future; it is essentially and necessarily always a planning and acting for a better future. Its aim is always to render future conditions more satisfactory than they would be without the interference of action. The uneasiness that impels a man to act is caused by a dissatisfaction with expected future conditions as they would probably develop if nothing were done to alter them. In any case action can influence only the future, never the present that with every infinitesimal fraction of a second sinks down into the past. Man becomes conscious of time when he plans to convert a less satisfactory present state into a more satisfactory future state.

For contemplative meditation time is merely duration, "la durée pure, dont l'écoulement est continu, et où l'on passe, par gradations insensibles, d'un état à l'autre: Continuité réellement vécue."<sup>2</sup> The "now" of the present is continually shifted to the past and is retained in the memory only. Reflecting about the past, say the philosophers, man becomes aware of time.<sup>3</sup> However, it is not recollection that conveys to man the categories of change and of time, but the will to improve the conditions of his life.

Time as we measure it by various mechanical devices is always past, and time as the philosophers use this concept is always either past or future. The present is, from these aspects, nothing but an ideal boundary line separating the past from the future. But from the praxeological aspect there is between the past and the future a real extended present. Action is as such in the real present because it utilizes the instant and thus embodies its reality.<sup>4</sup> Later retrospective reflection discerns in the instant passed away first of all the

1. In a treatise on economics there is no need to enter into a discussion of the endeavors to construct mechanics as an axiomatic system in which the concept of function is substituted for that of cause and effect. It will be shown later that axiomatic mechanics cannot serve as a model for the treatment of the economic system. Cf. below, pp. 353-357.

2. Henri Bergson, *Matière et mémoire* (7th ed. Paris, 1911), p. 205.

3. Edmund Husserl, "Vorlesungen zur Phänomenologie des inneren Zeitbewusstseins," *Jahrbuch Für Philosophie und Phänomenologische Forschung*, IX (1928), 391ff.; A. Schütz, *loc cit.*, pp. 45 ff.

4. "Ce que j'appelle mon présent, c'est mon attitude vis-à-vis de l'avenir immédiat, c'est action imminente." Bergson, *op. cit.*, p. 152.

action and the conditions which it offered to action. That which can no longer be done or consumed because the opportunity for it has passed away, contrasts the past with the present. That which cannot yet be done or consumed, because the conditions for undertaking it or the time for its ripening have not yet come, contrasts the future with the past. The present offers to acting opportunities and tasks for which it was hitherto too early and for which it will be hereafter too late.

The present qua duration is the continuation of the conditions and opportunities given for acting. Every kind of action requires special conditions to which it must be adjusted with regard to the aims sought. The concept of the present is therefore different for various fields of action. It has no reference whatever to the various methods of measuring the passing of time by spatial movements. The present encloses as much of the time passed away as still is actual, i.e., of importance for acting. The present contrasts itself, according to the various actions one has in view, with the Middle Ages, with the nineteenth century, with the past year, month, or day, but no less with the hour, minute, or second just passed away. If a man says: Nowadays Zeus is no longer worshipped, he has a present in mind other than that the motorcar driver who thinks: *Now* it is still too early to turn.

As the future is uncertain it always remains undecided and vague how much of it we can consider as *now* and present. If a man had said in 1913: At present—now—in Europe freedom of thought is undisputed, he would have not foreseen that this present would very soon be a past.

### 3. The Economization of Time

Man is subject to the passing of time. He comes into existence, grows, becomes old, and passes away. His time is scarce. He must economize it as he economizes other scarce factors.

The economization of time has a peculiar character because of the uniqueness and irreversibility of the temporal order. The importance of these facts manifests itself in every part of the theory of action.

Only one fact must be stressed at this point. The economization of time is independent of the economization of economic goods and services. Even in the land of Cockaigne man would be forced to economize time, provided he were not immortal and not endowed with eternal youth and indestructible health and vigor. Although all his appetites could be satisfied immediately

without any expenditure of labor, he would have to arrange his time schedule, as there are states of satisfaction which are incompatible and cannot be consummated at the same time. For this man, too, time would be scarce and subject to the aspect of *sooner* and *later*.

#### 4. The Temporal Relation Between Actions

Two actions of an individual are never synchronous; their temporal relation is that of sooner and later. Actions of various individuals can be considered as synchronous only in the light of the physical methods for the measurement of time. Synchronism is a praxeological notion only with regard to the concerted efforts of various acting men.<sup>5</sup>

A man's individual actions succeed one another. They can never be effected at the same instant; they can only follow one another in more or less rapid succession. There are actions which serve several purposes at one blow. It would be misleading to refer to them as a coincidence of various actions.

People have often failed to recognize the meaning of the term "scale of value" and have disregarded the obstacles preventing the assumption of synchronism in the various actions of an individual. They have interpreted a man's various acts as the outcome of a scale of value, independent of these acts and preceding them, and of a previously devised plan whose realization they aim at. The scale of value and the plan to which duration and immutability for a certain period of time were attributed, were hypostatized into the cause and motive of the various individual actions. Synchronism which could not be asserted with regard to various acts was then easily discovered in the scale of value and in the plan. But this overlooks the fact that the scale of value is nothing but a constructed tool of thought. The scale of value manifests itself only in real acting; it can be discerned only from the observation of real acting. It is therefore impermissible to contrast it with real acting and to use it as a yardstick for the appraisal of real actions.

It is no less impermissible to differentiate between rational and allegedly irrational acting on the basis of a comparison of real acting with earlier drafts and plans for future actions. It may be very interesting that yesterday goals were set for today's acting other than those really aimed at today. But

5. In order to avoid any possible misunderstanding it may well be expedient to emphasize that this theorem has nothing at all to do with Einstein's theorem concerning the temporal relation of spatially distant events.

yesterday's plans do not provide us with any more objective and nonarbitrary standard for the appraisal of today's real acting than any other ideas and norms.

The attempt has been made to attain the notion of a nonrational action by this reasoning: If *a* is preferred to *b* and *b* to *c*, logically *a* should be preferred to *c*. But if actually *c* is preferred to *a*, we are faced with a mode of acting to which we cannot ascribe consistency and rationality.<sup>6</sup> This reasoning disregards the fact that two acts of an individual can never be synchronous. If in one action *a* is preferred to *b* and in another action *b* to *c*, it is, however short the interval between the two actions may be, not permissible to construct a uniform scale of value in which *a* precedes *b* and *b* precedes *c*. Nor is it permissible to consider a later third action as coincident with the two previous actions. All that the example proves is that value judgments are not immutable and that therefore a scale of value, which is abstracted from various, necessarily nonsynchronous actions of an individual, may be self-contradictory.<sup>7</sup>

One must not confuse the logical concept of consistency (viz., absence of contradiction) and the praxeological concept of consistency (viz., constancy or clinging to the same principles). Logical consistency has its place only in thinking, constancy has its place only in acting.

Constancy and rationality are entirely different notions. If one's valuations have changed, unremitting faithfulness to the once espoused principles of action merely for the sake of constancy would not be rational but simply stubborn. Only in one respect can acting be constant: in preferring the more valuable to the less valuable. If the valuations change, acting must change also. Faithfulness, under changed conditions, to an old plan would be nonsensical. A logical system must be consistent and free of contradictions because it implies the coexistence of all its parts and theorems. In acting, which is necessarily in the temporal order, there cannot be any question of such consistency. Acting must be suited to purpose, and purposefulness requires adjustment to changing conditions.

Presence of mind is considered a virtue in acting man. A man has presence of mind if he has the ability to think and to adjust his acting so quickly that

6. Cf. Felix Kaufmann, "On the Subject-Matter of Economic Science," *Economica*, XIII, 390.

7. Cf. P.H. Wicksteed, *The Common Sense of Political Economy*, ed. Robbins (London, 1933), I, 32 ff.; L. Robbins, *An Essay on the Nature and Significance of Economic Science* (2d ed. London, 1935), pp. 91 ff.

the interval between the emergence of new conditions and the adaptation of his actions to them becomes as short as possible. If constancy is viewed as faithfulness to a plan once designed without regard to changes in conditions, then presence of mind and quick reaction are the very opposite of constancy.

When the speculator goes to the stock exchange, he may sketch a definite plan for his operations. Whether or not he clings to this plan, his actions are rational also in the sense which those eager to distinguish rational acting from irrational attribute to the term "rational." This speculator in the course of the day may embark upon transactions which an observer, not taking into account the changes occurring in market conditions, will not be able to interpret as the outcome of constant behavior. But the speculator is firm in his intention to make profits and to avoid losses. Accordingly he must adjust his conduct to the change in market conditions and in his own judgment concerning the future development of prices.<sup>8</sup>

However one twists things, one will never succeed in formulating the notion of "irrational" action whose "irrationality" is not founded upon an arbitrary judgment of value. Let us suppose that somebody has chosen to act inconstantly for no other purpose than for the sake of refuting the praxeological assertion that there is no irrational action. What happens here is that a man aims at a peculiar goal, viz., the refutation of a praxeological theorem, and that he accordingly acts differently from what he would have done otherwise. He has chosen an unsuitable means for the refutation of praxeology, that is all.

8. Plans too, of course, may be self-contradictory. Sometimes their contradictions may be the effect of mistaken judgment. But sometimes such contradictions may be intentional and serve a definite purpose. If, for instance, a publicized program of a government or a political party promises high prices to the producers and at the same time low prices to the consumers., the purpose of such an espousal of incompatible goals may be demagogic. Then the program, the publicized plan, is self-contradictory; but the plan of its authors who wanted to attain a definite end through the endorsement of incompatible aims and their public announcement is free of any contradiction.