ST. AUGUSTINE'S CONCEPTION OF TIME

WITH an elevation of thought and a poetry not unlike that of Plato, and with a nicely discriminating analysis that places him among the greatest of psychologists, Augustine investigates the nature of time. His subtle and profound mind found a peculiar attraction in the contemplation of the mystery of time, which is essentially bound up with the mystery of created being (De Civ. Dei XII 15). Few men have been as intensely sensitive to the pathos of mutability, of the rapidity, transitoriness, and irreversibility, of time.

Following his inclination to subjectivism, Augustine asks himself how time represents itself to the mind. He first seeks to render the idea of time clear by a brief, provisional definition, based upon the usual idea that time has three parts. While one meets nothing but riddles in an investigation of the nature of time, nevertheless so much is certain, that if nothing were passing, there would be no past; if nothing were to come, there would be no future; and nothing would exist, if there were no present. The past is that which is no more; the future that which is not yet. And if the present were perpetually present, there would be no longer any time, but only eternity. For the present to belong to time it must pass. Hence time only exists because it tends to not-being.

A logical analysis of the various conventional time-intervals discovers that the present is an instant of time which can no further be divided into smaller particles. The time-atom flies with such speed from the future to the past that it cannot be lengthened. This time-particle or present has no space. Thus, the present being the only real time, it is diminishing to an inextensive point. Such a conception would be in the tradition of the mathematical conception of time. "Si quid intelligitur, quod in nullas jam vel minutissimas momentorum partes dividit possit. . . . Praesens autem nullem habet spatium" (Conf. XI 15). Obviously this conception of time is the same as that of Descartes. Doubtless Augustine is far from attaining a formula as clear as the enunciation of a geometrical theorem. The principal thing is that he recognized the possibility of a mathematical analysis of time. Even though he does not know what time exactly is, he at least states what it is not, often the sole solution of many problems.
On the other hand, Augustine presupposes that the present is only inextensive if subjected to a logical analysis, that in reality it is still felt as duration. In general he admits that the present has no extension in abstraction. It cannot remain for long as an indivisible instant; for, however small the extension in duration, the present instantly turns itself into a past which is no longer and a future which is not yet.

The three dimensions that we customarily distinguish thus reduce themselves to one, the present, in which the past survives in memory and the future preëxists in some way in the form of an anticipation. But the indivisible present does not cease to vanish, neither is it in reality entirely devoid of any extension of duration. The individual durations dovetail, so to say, because they have diverse contents. The number of isolated intervals can be readily noted, and thus one is in possession of a remembered or an expected total durational present.

Time thus reduces itself to the impermanent, being made of a succession of indivisible instants. It has therefore no relevance to the stable immobility of divine eternity: "tempus autem quoniam mutabilitate transcurrit aeternitati immutabili non potest esse coæternum" (De Civ. Dei XII 15). Between God and the creature is the same difference as between a consciousness in which all the notes of a melody are simultaneously present, and a consciousness which perceives them only in succession. In its normal operations the human mind through memory in some measure transcends time, as, for example, when we apprehend as a whole a metre or a melody, though the individual notes and sounds are successive not simultaneous (Conf. XI 33).

The difficulty is not only to account for eternity, which escapes us; for time itself, which sweeps us off our feet, is a mysterious reality. The essence of time is the indivisible instant of the present, which knows itself to be neither long nor short. How then can we speak of a longer or shorter time, or even of a time double the other? However, we measure time. That is a stubborn fact. But how can we measure the length of a past which is no more, of a future which is not yet, or of an instantaneous present? What we measure is the absence of the present. It is therefore not correct to say that the past or the future is long. We rather say of
the past that it was long, and of the future that it will be long. But can one truly say of the present that it is long? Can it be measured? A century cannot be present, neither a year, nor a month, nor a day, nor an hour. Time is never simultaneously present in all its parts, but only in an indivisible instant. Aristotle already said: "Nothing exists of time except the present which is indivisible" (Physics II 2). Therefore neither the present nor the past nor the future can be called long or short.

Nevertheless, the fact remains that we measure time, that we make comparisons between the intervals of time. Is it nothing we measure? Have past and future no real existence? How is it that out of an unrealized future, out of not-being, the present emerges, and that the present in turn instantaneously submerges into the past, where it is annihilated? If the past has no real existence, then all history would be false, and if the future has no real existence, prediction would be impossible. They both have an objective existence in the sense that they are being discerned in the mind. While I neither perceive the past nor the future, I know where they are. For when we recall the past, we do not recall the actual events, which are no more, but the thoughts and images these have left in our mind. Our infancy vanished into the past, but we see present its image when we revive it in our memory. But if the future cannot be foreseen by means of images, how is it predicted? Just as we infer the future sunrise from the aurora by means of signs, so we learn to know the future. Prediction or prevision is a refined inference from cause-and-effect relations (Conf. XI 19).

Augustine is quite aware that one of the most intricate difficulties of the problem of time is the question how time is measured. This phase of the problem raises more riddles than solutions. No one shows a keener appreciation of the contradictions involved in the proof of the objectivity of time. If time is nothing, if the past and future have no real existence, how can one measure them? For in order to measure anything there must be something. No one measures the non-existent. While no part of time is, we yet measure it. The solution of the paradox is that time is present in and measured by the mind. There are thus properly not three times—a past and a future which are not, with an immediate present
which is a mere point of transition between two non-entities; but there are three presents, a present of things present, a present of things past, and a present of things future. The present of the present is attention, the present of the past is memory, and the present of the future is expectation. This triple mode of the present exists in our mind, or not at all. The only answer Augustine can give to the one who asks him how he measures the non-existing and non-spatial times is: "I know..." In other words, the question still is, is time measured if it is not space? It is a profound enigma.

With renewed zest Augustine attempts once more to give verbal precision to the nature of time before he tells how we measure it. To resolve the problem we may identify time with motion. To grant such a solution seems an excessive simplification of Aristotle. For if time is not motion, it must be its own measurement. Thus we can measure time with time, motion with motion. However, the motion of a body is essentially its displacement between two points situated in space. This spatial displacement continues to be identical whatever the time consumed by the body. Moreover, if the body remains immobile at the same point, there is no motion whatever; yet I can still estimate with more or less rigorous exactitude the time of its immobility. Thus the motion which time measures is one thing, and the time which time itself measures is still another thing. Time is thus not the motion of bodies (Conf. XI 24).

Feeling that the mind in some sense transcends the process of time it contemplates, Augustine could not rest satisfied with the naive objectivism of Greek science, which identified time with the movement of the heavenly bodies. For if the movement of bodies is the only measure of time, how can we speak of past and future? A movement which has passed has ceased to exist, and a movement which is to come has not yet begun to exist. There remains only the present of the passing moment, a moving point in nothingness. Therefore, Augustine concludes, the measure of time is not to be found in things, but in the human mind.

But how do we measure time itself? Do I measure it by comparing a larger movement with a more limited movement? If it is with time that I measure motion, with what do I measure time? With time? In a certain sense yes; for I can measure the duration
of a long syllable with that of a short one, or that of a poem with the number of verses it contains, which verses measure themselves in their turn by the number of feet, the duration of their feet by that of their syllables, and those of their long syllables finally by those of the short ones. But what can I say about it? If it is a question of their length on paper, that is space, not time, that I measure. If it is a question of verses pronounced by the voice, the dissociation of time and motion reappears under another form; for a short verse can be pronounced so that it lasts a longer time than a long verse, and vice versa. It is the same with a poem, a foot, a syllable.

Measurements of this kind are spatial, not temporal. Thus Augustine does not ignore the fact that time is not only a function of the amplitude of motion, but also of speed. It is above all in ourselves that we must seek the measurement of time.

In order to discover the connection between the permanent and the transitory, which for Augustine is after all the whole problem, he has recourse to a metaphor according to which he conceives of time as something analogous to space, as a kind of distension of the mind, which alone renders possible the coexistence of the future and the past in the present. Such a solution is characteristic of Augustine. In every question he finds the trial within. Here it is in memory and thought that he catches sight of his quarry. Not unlike Bergson he defines the mind in terms of attention. And as the human mind is but a dispersed image of the One, it is natural that it should have to stretch itself out in recollection of the past and strain to the future.

The distension of the mind enables one to perceive duration and makes possible the measurement of time. It is impossible to measure what does not endure and what has ceased to exist. Augustine means by mental distension the faculty of the mind to know successively the past by memory, the future by prevision, and the present by actual perception, to dilate itself, so to say, by prevision and memory from the remotest future to the most distant past.

Augustine is still not satisfied with the proffered solution of the problem at hand. If the non-existing future and past together with the instantaneous present are not amenable to measurement, neither can the uninterrupted passage of an event be measured, for meas-
urement implies the conjunction of a beginning and an end. That is, the mind has to know at least two terms which are simultaneously in the present in order to be able to measure time. The solution of the problem is in showing what the connection between the beginning and the end, between the two terms, is. Not the transition of things measures time, but the impression they have left in the mind. Time is nothing but an impression, a mode of thought, a reflex of things passed and passing, and in particular a function of memory. The non-existent past is measured in memory. The impression which preserves the transitory survives the things themselves, and comparing them a certain measurement of their intervals or successions is made possible. What is true for the memory of the past is also true for the anticipation of the future.

Time no longer divides itself into a present, past and future existing outside of us. Its three dimensions coincide, although the present is the only one which is real and invisible. They coincide by the grace of the mind. The enduring attention of the mind provides the coincidence of the three dimensions of time. Memory, "the light of the intervals of duration", is the subsisting distension of the present into the future and into the past. It is interesting to note the analogies which Bergson's and Augustine's psychology of duration have in common.

Finally, Augustine compares the time-process with the recitation of a poem which a man knows by heart. Before it is begun the recitation exists only in anticipation; when it is finished, it is all in memory; but while it is in progress, it exists, like time, in three dimensions. And what is true of the duration of a poem, holds equally good of the duration of each line and syllable of it. It is equally true for the whole life of man, whose actions are its parts; and, finally, it holds good for the whole human race, which is the sum of individual lives (Conf. XI 28).

If this is so, what meaning is there to the question what did God do before the creation? For human consciousness in bringing the future and the past together in attention, the words before and after have no longer any significance. What tremendous effort does it take to attain a tolerable comprehension of the relation of created
time and creative eternity! Man can only succeed on condition that he withdraws his thought from the flux of time, and integrates in a permanent present the totality which is no more and which is not yet. Thus alone may he and now pass from time to eternity (Conf. XI 11; 29; 31).

Thus the metaphysical alone in the end provides the solution of the psychological problem of time. True, man knows by analysis as well as by intuition. In analysis time is succession. In intuition time is no more. It is eternity. Time is the distension of the eternal; eternity is an immutable present, which is neither preceded nor followed by another moment. Man’s weakness in perceiving things simultaneously in the unity of an indivisible act, prevents things from existing simultaneously in the unity of a fixed permanency. Whatever succeeds each other is incapable of coexisting (De Civ. Dei XI 6; XII 15). Whereas men know things temporally, that is, in succession, God knows eternally, that is, simultaneously. Whereas human consciousness always knows exactly at which point of its unwinding activity it is, divine consciousness is unchangeably self-subsisting on its level. Having started with eternity in his study of time, Augustine also ends with eternity.

For man life is wasted because it flows, because it dissipates and consumes itself in time. The sense of this is itself due to the presence and operation of something which does not pass. For Augustine that something was no lifeless abstraction, but a concrete fullness of life, ever the same because it contains in itself all the values produced at each passing moment of time. This apprehension of eternity was one of the major factors that molded the philosophy of Augustine.

It is thus in keeping with the heritage of Neoplatonism that Augustine seeks to preserve the dignity of God by placing him outside of time and space. Hence eternity and time are absolutely incompatible. Their differences are absolute. Time implies change, movement, transition, succession, imperfection, and improvement. Eternity is all that time is not. It is the immutable, quiescent present, the simultaneous unison of that which unfolds in time. Time and eternity are incommensurable. They are not of the same dimension. There is no comparison between an ever fixed
eternity—*semper stans aeternitatis*—and a time that is never fixed (*Conf.* XI ii). Being a totally realized perfection, God is wholly independent of time. He is an immobile eternity. His life is not an ascent to still higher perfections. Neither is it a descent to a lower world. It is a process without external aims. Its process is self-concentrated, circulating on its own horizontal level.

There are two unique peculiarities in the nature of time, which in their contrast constitute an antinomy. They are, first, the self-finality of the present; and, second, the irrevocable irreversibility of its sequence. Only the experienced instant is given. In every instant a whole world perishes, and in every instant a whole world emerges out of nothing. Infinite past and infinite future do not exist. Moreover, because the present condenses itself to an inextensive point, it seems to dissolve all existence into emptiness. The paradox of the evaporation of the moment and the annihilation of the present is a profound abstraction. How is one to resolve the paradox of the annihilation of the intervals of time, the nonreality of the past and the future? Nothing is ever destroyed. Neither is nothing ever magically produced. The infinite moments of time, while perishable for man, coexist in God's eternal present. They abide in the *nunc stans* of the scholastics. The souls of men pass through these perishing intervals of time until they come to rest in God.

This is indeed a solution. However, it opens up new problems. Augustine leaves the question of the variability of the experience of the present—from individual to individual and within the lifespan of the individual—untouched. Is there a present which encompasses all men? What relation if any exists between God's infinitely enduring present and the varying consciousness of the present of men? Metaphors alone seem to serve here as tools of interpretation.

Based upon the presuppositions of his system of ideas, Augustine might have answered the problem of the relationship of God's eternal present and man's varying experience of the present as follows: There exists a similarity as well as a difference between God's eternal present and man's consciousness of the present. They both are real. While there are infinitely many things timeless-
together in God's eternal present, there are only minute segments of eternity in man's limited consciousness of the present. The distribution of the realities of the present among men is due to their finiteness; the passage of the souls of men through the divine coexistence is an arrangement intended to procure for the finite souls the greatest possible enrichment. Augustine may give an intimation of all this in his expression "we pass through God's today". God thus encompasses all souls.

As there is no time in God, he does not create successively in time. Augustine realizes the difficulty of how God could decree eternally that there should be a finite creation of a few thousand years. Since creation had a beginning with time, it also will have a dramatic end with time. If therefore time has no significance for God, how can God eternally determine a finite period of creation? Augustine struggles with the problem, but is unable to solve it by the tools of the Greek speculative tradition. He could have made it plausible by including time in God, that is, by using the tools of the Hebrew tradition. In the latter heritage eternity meant that which endures through all time. Augustine often uses the language of the Hebrew tradition. "Thou art the same and thy years fail not." But by merely alluding to it, he failed to work it out, as it was contrary to his basic assumptions.

The inexorable irreversibility of temporal sequence is an indisputable fact. Reality is perpetually clipped off from the duration of the present. The non-existent gnaws itself from the past into the future. The present endlessly assimilates reality to the non-existing future. How is one to escape from this absolute fact? One may assume an eternally coexisting manifold which implies all the possible momentary worlds. Augustine left this problem also unanswered. In accordance with his ideas he could have maintained that God has fixed the unilateral dimension of time and that the passage through the divine now was identical for all men.

The recognition of the uniqueness and irreversibility of the temporal process is one of the most remarkable achievements of Augustine. Hence time is not a perpetual revolving image of eternity, but is irreversibly moving in a definite direction. It has an organic finality. Creation has had an absolute beginning and trav-
els to an absolute goal. There can be no return. That which is begun in time is consummated in eternity. Augustine was therefore actually the first man to discover the meaning of time, in spite of the fact that Plato, Aristotle, and Plotinus, had written about it. While their endeavor was primarily to explain it away, a typical Greek characteristic, Augustine explained the time-process itself. He was the first thinker to take time seriously.

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