ARTICLES

TIMING

ROBERT SOKOLOWSKI

"Was" is not "is."
—As You Like It, III, 4

The kinds of time we are now most familiar with are those that involve clocks and calendars. Both kinds involve motion, but clock time puts us in the direct presence of the motion in question while calendar time deals with motion that is absent from us.

I

Clock time involves two motions, one of which can be easily counted, such as the movement of one of the hands around the face of a watch or the movement of sand from one part of a timer to another. The repetition and regularity of such motions make them easy to number. They can be made to keep on repeating themselves, each can easily be taken as the same as any other, and we can easily tell that there have been "three" or "eight" of them. At one time the primary instance of clocking motions were the movements of the sun, moon, and stars, but the precision of our clocks has made these celestial motions recede into the background in our handling of time. Six A.M. or seven P.M., 600 hours or 1900 hours, are more prominent for us than sunrise and sunset; we say that the sun rises at 600 hours and sets at 1900, as though the rising and setting were placed against a process more fundamental than these solar events. But of course our clocks still run against the pattern of the sun, moon, and stars, and many of the standard sums we reckon with in clock time are defined by the less accurate but larger wholes, the days, months, and years, that the movements of the heavens provide.

Clock time requires that we hold two motions together, the motion that is easily numbered and the one we wish to measure. The motion of the hand on a watch is held together with the motion of a man running around a track or that of a car moving from one spot to another. We begin counting the measuring motion when the motion to be measured starts, and at the end of the measured motion we will have come to a sum of the motion by which we measure. We then equate the sum and the motion measured: the run was two minutes long, the drive was three minutes and a half.

In the ordinary activity of timing, we are concerned with the “how long’s” of particular motions, so we take pains to count accurately. Or we may wish to devise a better clocking motion than those we already have. But in what we are doing now, in our philosophical reflection, we are concerned with time and timing as such, not with times measured or the means for measuring. We want to show how time and timing surface; we will therefore bring out many things that we simply look through, and do not look at, when we time motions. To some readers what we say may seem trivial, but that will indicate that the readers are looking for the wrong thing: most likely they will be looking for a better way of measuring time or a way of making sure that we have measured time correctly. Our concern is simply to consider time, not to use it more efficiently. Our concern is to become aware of what we already possess and what we take for granted, not to learn something entirely new.

But does clock time really need two motions, one held against another? Could we not consider the clock motion by itself? Could we not just watch the sand move in the hourglass or the hands move on the timepiece? If we watch only that, we do not involve the motion in time. It remains only motion. For the motion to be involved in clock timing, it has to be placed against some other motion, at least against some vague, undifferentiated process. If we watch an hourglass perform and finally said, “Five turns of the hourglass!” we would, most probably, not be concerned only with the hourglass and its movements; we would be observing that “so much life” has gone by. Or we might surreptitiously have changed the movement of the sand from being the clocking motion to being the clocked motion; we might think that while a whole afternoon has gone by—now clocked by the movement of the sun—the sand has shifted back and forth five times. One or the other of these contrasts would have to occur, either measuring the passage of something by means of the hourglass or measuring the movement of the hourglass by means of another motion, if we are to keep the sand’s motion involved with clock time. If we removed every contrast, if we stayed with the sand’s movement all by itself, the timing would disintegrate.

But suppose we do focus only on the single motion by itself. If we count the repetitions of the motion, if we count the five turns of the hourglass and so “measure” the sand pouring through the glass, do we not somehow involve the motion with time? Not really; when we say, “One,” “Two,” “Three,” “Four,” “Five turns,” we have not measured; we have only counted. To reach a total is not to measure. To reach a sum is not to make an equation, which is what we do when we measure. In measuring we say one whole is the same as another; in the case of timing we say, for instance, that this run is equal to two revolutions of the hands on the stopwatch. But simply totalling does not involve placing one whole with another and calling them equal.

So simply to count the sand passing through the timer is not to be engaged in measuring a motion. But perhaps we could find some other motion that is attached to the motion of the sand, one that would provide the differences needed for time. What about my own process of watching the sand move, a watching that is interrupted by my counting out the numbers? Is not the motion represented schematically by:

“.... One ... Two ... Three ... Four ... Five”

a motion different from the sand’s falling? Perhaps this movement of mind could serve as another motion, positioned against the sand’s passage, to make up time.

There are two reasons why this will not do. (1) The activity of watching is not one of the processes that can measure, or be measured by, the motion watched. Watching is like the spotlight shining on the actor and the stage props; just as the spotlight’s illumination is not one of the objects presented on the stage, so watching is not one of the motions equated when one movement is measured by another. Both of the motions involved in clocking must, so to speak, be on stage and spotlighted.

1 If we place a yardstick down five times against a wall, the sum of the placements measures another whole, the wall. We have measured the wall, not the placements, although we have counted the placements. Simply counting five turns of the hourglass would be like summing the placements of the yardstick without equating them with anything.
(2) Saying "One," "Two," "Three," "Four," "Five" does not cut up or count the watching. It counts parts of the motion of the sand. We have not had three watchings when "Three" is said, but three turns of the hourglass; but we have had three rotations of the clock's hand when we say "Three minutes" while we measure the sprinter running. Furthermore, the saying of each number is not continuous or fluid. It does not go along with the sand's motion, as the clock's motion runs along with the man racing on the track. Furthermore, each number marks an end; it is not positioned against a process to be measured. When the number is stated, the motions are over.

Both watching and counting are presentational. They present something other than themselves, and in the case of timing they present two other processes—the man running and the stopwatch moving—as well as the time that occurs in between the two. Of course someone else could time my watching; someone else could observe and say, "He watched the ocean for fifteen minutes." This would be like placing a spotlight on the stage and using it and its illumination as props, while lighting the stage with still another spotlight. But in such a case the new observer's watching is not the process being measured. His watching is the presentational process that lets something else—my watching—be clocked.

Clock time requires therefore that two motions, the clocking and the clocked, be held together. In our ordinary involvement with time and in our practical concerns, we focus first on the motion clocked—the water boiling, the man running—and take the clock for granted. When our clock needs repair, or when we want to build a better clock, we turn our attention to the clocking motions. But the togetherness of both motions is almost never regarded because there is really nothing we could do about it; their being together never stands in need of repair. We also tend to look through and not at ourselves as the ones who hold the two motions together and register an equation between them. Thus the use of clocks and the phenomenon of time occur in a setting that we congenitally overlook. We must invoke a special kind of recollection to become aware of this matrix.

II

Let us now turn away from the activity of holding two motions together in clock time, and let us concentrate on the single person watching the sand move in the hourglass, counting the turns of the glass. When he says, "Three" or "Four," he marks what has just finished, the complete passage of the sand from one side to the other. He gives a number to what is over. Calendar time is something like this. In a calendar we give a discrete number to the whole day or the hour and thus consider the day or the hour as a single completed thing. But calendar time is not enmeshed in the motions which time and are timed: in calendar time there is no "watching" process. We do not continuously observe the day or the hour and then number it at the end; we just have the number. There is also no positioning of one motion against another, nothing like the movement in the hourglass being placed against the movement of, say, the water boiling. There is no present motion, whether measuring, measured, or observing, in a calendar. A calendar works at a distance to and in the absence of what is counted in it. It reports its wholes as terminated, not as going on. Calendar time is to clock time as a final score is to a game.

Of course a calendar does not only look backward toward the completed hour or day; it also looks forward to a coming period. But even in such a prospect, it reports the day as a whole and each event as an episode, not as going on. It signals the start or the finish of each process, it does not go along with the process. Even my current use of this year's calendar, although contemporary with part of this year, is not a clocking of this year. It puts a distance between this year, or today, and me, even though I use it during this year or during this day. My using the calendar is not an observational counting of the day or the year, nor is it using it the motion against which the day or the year is measured. A calendar is the fruit of the distance from life that sheer numbers let us have. Instead of leaving us engaged, almost buffeted in motion, calendars put us on dry land where we can think about and arrange beginnings and ends. But this distanced relief, powerful and far-seeing as it may be, does not of itself accomplish anything, no more than looking at a road map, helpful as it might be in organizing a trip, will as such get us anywhere. The numbers in a calendar have to become again the numbers used to mark the active beginning and end of motions, such as the "Three" or the "Four" stated at the turn of the hourglass or the "Two o'clock" I note as I walk into my dentist's office. The numbers used in reporting have to become numbers used in registration.

And what was once, in my appointment calendar, a schedule to be done can become a record of what has been done. This occurs with
no action being taken on the calendar itself, so distant is the calendar from immersion in motion; we just have to let time go by. There is, of course, a movement involved in using a calendar; we have to turn the pages, scan each page, and carry out the processes of anticipating or remembering, but these motions are not placed against the movements reported in the calendar. They are neither the fluid measure with which we number an ongoing motion, nor are they the process of watching and counting a motion going on before us. They are an encapsulated motion, one kept distant from the processes mentioned through the calendar.

We may note that a digital clock resembles a calendar in some ways and a normal clock in others. Strictly speaking a digital clock does not present a continuous motion to be placed against another motion as a measure; it marks only an end or a beginning. It counts and does not measure. However it does not provide us with the possibility of surveying, as a calendar does. It gives only the last counted number, the number we would have uttered if we were placing a clock motion against the measured motion. Hence it involves us in the direct presence of the clocked motion, while a calendar does not. However it drains out the fluid measuring motion that a normal clock provides and gives only the discrete borders. The flip of a number in a digital clock is not like the sweep of a hand on the face of a watch.

The various motions we have distinguished in discussing clocks and calendars are:

1. the motion being clocked (running around a track);
2. the clocking motion (sand passing in an hourglass; hands rotating around the face of a watch);
3. the observer's activity, the action of the clocker (perceptually holding the two motions together and measuring one by the other);
4. watching and counting a single motion by itself;
5. using a calendar.

The first three motions are all aspects of one activity. In this activity, and in that described under the fourth heading, we are directly involved in the presence of the motion measured or counted. We register time. In the fifth case we work in the absence of the motions to which we refer; the motions, and the time they involve, are here reported and not registered.

Clock time and calendar time can be correlated with two temporal forms, that of present, past, and future, and that of before and after.

(A) Present, past, and future are determined especially in terms of a clocking motion, the motion against which the measured motion is to be held. The present is the particular unit of the clocking motion that is going on. If I am using a sand timer, say a "three minute" timer, the fall of sand I call "this one" is the present. The present is therefore adjectival; it needs completion, as in "the present fall of sand in the timer," "the present course of the sun," "the present sweep of the second hand." In this context, it would be incorrect to consider "the present" to be a noun.

In order to mark a motion as the present motion, we must have begun counting the motions. We must see this one as discrete, as having a start and finish, as being one in a series of repetitions. In any such series, one of the motions is always privileged, the one that is actual. It stands out against those that have been actual and those that will be; there are always "the past motions" and "the future motions." Even if we stop using the timer, so that one of the falls of the sand becomes the last motion in that particular series, we still see that last motion as profiled against other motions that carry on, like the motion of the clock on the wall, motions that could be taken as sequences in turn. The running down of one clocking motion always occurs against the steady running on of others. "The present" thus floats ambiguously between a precise "one" that is going on, like the fall of the sand or the course of the sun, and an indeterminate "one" like this argument, this excursion, this visit, or this heat wave, which are less exact in being counted and repeated.

We may feel somewhat dissatisfied with such ambiguity about what is to count as the present, and may attempt to fix a motion that somehow underlies all the rest by being more exact, unerring, universal, and final, in the sense of permitting no motion more basic than itself. We may be led in three different directions in our attempt to find this ultimate vehicle for time. (1) We may look for an ultimate, regular, and universal physical motion, such as atomic vibrations.²

(2) We may turn to our flow of consciousness and try to find the ultimate pulse that underlies all the acts of consciousness and the things presented in them. (3) We may, as Newton did, try to establish a pure flow of time itself, absolute time, a movement and sequence independent of any motion, whether material, psychic, or biological, one that carries on everywhere along with the events and processes that occur within it. One or other of these three possibilities will, it might seem, provide a backbone for the various clocks of convenience that we use here and there; we would then have "the ontologically real time" as opposed to the conventional times that come merely from our agreement on a local instrument of measuring.

But such an attempt to get at the "real" time is misguided. It is a confusion of philosophical explanation with the enterprise of finding better ways to measure time. We will clarify this confusion gradually as we proceed through this essay, but some remarks can be made now. (1) The most ultimate motion, such as atomic vibration, is not only a more precise measuring apparatus and not a definition of what time is; to find the smallest unit is not to show what something is. Furthermore such an ultimate unit of motion is not perceivable as motion. We need counters to enumerate it, and a counter functions after the fashion of a digital watch and not as an hourglass or a chronometer. This form of time does not clarify the original of clocking, in which two observable motions are held together and one is measured by the other. (2) To turn to the pulses of conscious life is misguided not only because it is a hopeless task to determine how large the spurious present is (each pulse of consciousness is determined as "one" not just by its own internal structure, but by what is presented to us in it), but also because this is the wrong place to look for the elements of time. Time is both inside and outside consciousness, and we cannot find what time is simply by looking within. (3) To postulate an absolute time running along with the processes and events occurring within it, with one chronon constantly following another, is to fall into the typical philosophical mistake of making a thing out of a dimension of things. It involves an unnecessary doubling of events and processes: while this car goes from here to there, the sequence of chronons goes along with it; at the moment John wins the race, another event, a shadow event—the ending of a chronon—is also supposed to happen. To make time into such a new series of events and processes is to turn the elements of measuring into the elements of being. But the fact that someone could have postulated absolute time can tell us something about time, provided we can disentangle the dimensions that are confused in such a doctrine.

The issue of the present raises the question of how a motion can be broken up into units, one of which is present while others are past or yet to come. It might seem that the unbroken motion is there first, while the cuts that break the motion up into countable units are added by the mind. The motion seems to be real and true, the units seem to be conventions we impose on it. But this Kantian-like interpretation of time makes the units far too external to the motion; a motion can be counted as one because it presents itself somehow as one. We have to do the counting to let the motion emerge as one, and also to let it emerge as "third" or "eighth," but the motion can and does so emerge. If it is the third, it is not the fifth. The mind is involved in marking time, but time is not just mental, since it is a numeration immersed in motions that both are and are counted. Slabs of wood that are cut and made part of a house are parts of a house—they are a window frame or the edge of a roof—and the house is, even though it would not be if a mind had not been at work in it. The house is not just in the mind, even though it is partly of or by the mind. Likewise the fifth passage of the sand is the fifth passage, even though it would not be such had someone not counted it. It is the fifth passage because even apart from the work of my mind, by virtue of what it is before it is counted, it can be presented as one, and as the same as many other such motions in a series. It is countable before being counted.

And although this motion is continuous, both within itself and with the other motions, with the other passages of sand "before" or "after" it, its "being one" or "being fifth" is not continuous. Hence its being now or being present is not continuous either. It is continuous as a motion but discrete as "the present motion" or "the motion

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2 I. Newton, *Principia*, tr. Motte-Cajori (Berkeley: University of California Press, 1966), vol. 1, p. 6: "Absolute, true, and mathematical time, of itself, and from its own nature, flows equably and without relation to anything external, and by another name is called duration."

4 See Adolf Grunbaum, *Philosophical Problems of Space and Time* (Boston: Reidel, 1973), p. 42: "The number of times which a given body B will contain a certain unit rod is a property of B that is not first conferred on B by human operations."
now,” no matter how large a present we are dealing with: a day, a minute, a second, this turn of the sand timer. Also, each present motion, as present, is contiguous to its neighboring motions and not continuous with them. The present motion or the motion now has the kind of discreteness that a sentence has, which, in contrast to the continuous flow of sound that sustains it, comes forward as one at once as a single statement. 5

However because the “one” of the present motion rests upon a motion that is continuous beyond the present one, the motion that is prominent as “now” is always trailing some motions and running ahead of others. To the extent that these are counted, the present is between past and future motions. The involvement of numbers, repetitions, and sequences establishes a definite past and future, as contrasted to a vague mythical time in which no real othering of present, past, and future takes place. But the numbers alone do not make up time, not without the motions they number: there is a future not just because we expect one, but because things are always moving on. And it is not just things that let there be a future and a past, but things moving and counted as moving. We cannot disengage the present, past, and future from the motions and events they qualify; we cannot make the adjectives “present, past, future” literally into nouns.

(B) But it is possible for us to take some distance to a particular instance of present, past, and future when we move into calendar time. If the temporal form of present, past, and future is especially involved in clock time, the temporal form of before and after is especially prominent in calendar time. Calendar time is defined precisely by not being enmeshed in the motions that are going on now. The one who uses calendar time refers to a period—already packaged by numbers—different from the countable motions in which he presently lives. Even if he refers to the day or week or hour he is enmeshed in while he uses the calendar, say the 7th of September, he refers to it at a distance and not as submerged in it. Thus the same words, “September 7,” can be used differently by the speaker who is clocking and by the one who is calendarizing. The difference lies not in what is identified but in how it is presented.

6  Gruenbaum admits the objective and “physical” reality of the relations of earlier and later or before and after, but claims that the now or the present, as well as the future and past, are mind-dependent or “psychological,” and that therefore becoming (as opposed to process or motion) is mind-dependent. See “The Status of Temporal Becoming,” in The Philosophy of Time, edited by Richard M. Gale (Garden City: Doubleday, 1967), pp. 322–33; also Philosophical Problems of Space and Time, pp. 314–29. Aristotle likewise said that time, as the measure of motion, is mind-dependent and that before and after belong to motion independently of mind (Physics, IV 14, 223a22–29). The major difference between Gruenbaum and Aristotle
Can we clarify how the before and after can be implicated in and yet detached from the present, past, and future? Being before and after is involved in the simple ordering of motions, without yet introducing numbers into their order. Ordering motions by before and after is analogous to ordering, say, pieces of wood of various sizes, ordering them progressively by size. This piece becomes ordered as smaller than the next but larger than the previous. This motion now is before the one coming but after the one finished. But there is no number yet: this piece of wood or this present motion is not yet marked as the fifth or the ninth. Being before and after is prior to enumerated time, and it helps introduce the demarcations that let us number a sequence. The analogy between time and spatial size and position—as in the row of pieces of wood—is not accidental. As Aristotle observes, “before and after,” or “before and beyond,” “fore and aft,” are first used to name spatial relationships, and indeed their temporal application depends on a spatial sequence: the motion is first

lies in what each takes awareness or the mind to be. Gruenbaum fails to recognize awareness as intentional or presentational. He takes it as an effect brought about by an external cause, not a presentation of anything except itself and its own reactions. Consequently there is really only self-awareness. Hence he says the present or the now is just a feature of awareness, not something belonging to what one is aware of. According to Aristotle the mind presents and counts motions, so in registering a present motion it is involved in something beyond itself. The difference between Gruenbaum’s position, which is shared by many other writers, and the position represented in this essay, is based not primarily on the concept of time but on the concept of consciousness. Strangely, Gruenbaum seems to imply that the only discourse that is about objective, physical reality is discourse about what is absent to us and not discourse about what is actually present.

D. H. Mellor’s Real Time (New York: Cambridge University Press, 1981) is an attempt to show that tenses are not real. Mellor distinguishes between tenses and dates and observes that the same temporal interval can be identified by a tense and by a date, but that tenses and dates differ since “dates are fixed and tenses are not” (p. 22). He uses our mundane identification of temporal units as an ultimate criterion of which units are real. The translatability of tenses into dates, and the contradictions that attend the purely objective use of tenses, make him deny the reality of tenses. It seems to me that Mellor does not analyze dates and tenses in terms of their presentational or intentional differences, as I have attempted to do in this essay by distinguishing between clock and calendar time. Only such a presentational or phenomenological analysis will get to the final differences in time and tense, since time and tense are essentially related to presenting. And only by getting to such final differences will we be able to preserve, philosophically, the reality of both time and tense.

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here, in the fore, and then there, beyond or afterward, and so we can distinguish two motions, one coming after the other. 7

Now when a motion gets a number (the third hour, January 20), it keeps its ordering of before and after, even though the number is more than the order. The ordering of before and after is inseparably bonded to the number the motion has, so if one keeps the number, the before and after has to be kept with it. And if we are very precise and very “scientific,” as one might say, we might be activating these numbers and orders in our present activity; we might be clocking exactly when it is we are doing whatever we do (clocking the fall of a body, clocking our reaction time). We normally do not do this, but if we are being extremely careful, say for legal reasons or for reasons of scientific experiment, for military maneuvers or for accurate timing in sport, we may in fact explicitly activate the clocking numbers and the ordering of before and after, in our present, past, and future motions. But then we can refer to those motions when they no longer are the present and immediately past and future motions. We may refer to what happened in the experiments as a function of real time, or to what the accused did on that date just after the close of business in the bank. That present, past, future is no longer active—we are in another one now—but it can be referred to in its absence in our reporting. It can be brought to mind as absent, and this is done in the present to which we are unavoidably fixed, which we cannot be out of—as long as it lasts.

When we are thus with the absent motion by referral, before and after take on a prominence they did not have when the motion was present. The number of the motion, that by which it is identified in our discourse about time, is no longer the name of what is going on now, but the name of what is now exhausted by being before the next motion and after the earlier one. 8 Thus the articulation of before and


8 The form “before and after” functions much as the form “object and feature,” which can apply to something bodily present to us and articulated, but which works also when we speak about the same object in its absence. In fact the form of object and attribute permits us to speak about the object in its absence, because the crisp differentiation between the context we are in and a context we are not in but are talking about, is made possible by linguistic, logical, and ontological syntax; by the breaking up of a distinct subject and predicate, noun and verb, object and feature. Until this syntac-
after lets us speak about a timed motion that is in a context distinctly other than that in which we have present, past, and future; it lets us enjoy calendar and not only clock time. Furthermore calendar time not only lets us hold on to passages that have occurred, it also lets us think ahead, in absence, about what is to come and is not yet in the offering. It lets us order not only past time but our distant future as well; and it lets us order not only the motions we will be immersed in, but those through which other men will pass at another time and another place: “Thus strategists hesitate over the map, the few pins and lines of colored chalk, contemplating a change in the pins and lines, a matter of inches, which outside the room, out of sight of the studious officers, may engulf past, present and future in ruin or life.”

In this enjoyment of a reported time, we refer to an elsewhere, but we do so in the present, with its tailing past and coming future. The activity of calendaring, although it gets us out of what we are immediately present to, is enmeshed in our present motions, just as the act of speaking about an absent context occurs in the context in which we presently live.

IV

We have associated the form of present, past, and future with clock time, and the form of before and after with calendar time. We now introduce the temporal form of now and then, which occurs especially in what has been called inner time, the time of remembering and anticipating and imagining. This kind of time mediates to us clock and calendar time; it lets us be able to use both calendars and clocks. And the form of now and then functions in the interaction between the two forms of present, past, and future, and before and after.

tical distinction occurs, there is only one global “context,” without differentiation. See Sokolowski, Presence and Absence, chapter 2, “Nouns, Verbs, and Contexts.”


on all the time, implicated with our being directly with the things around us, with our perceptions, actions, and decisions, as we are, even sensibly, always both in our immediate context and beyond it. And it is not only within ourselves that we encounter this form of now and then; when we look at someone else we see another as so "selfed," as being not just what is bodily there now, but the one who was and still is what he did before, who is somehow already what he will do later: the one who bears his memories and expects his future.

Inner time, displacement time, is different from calendar time also in being mobile. What we remember or imagine is going on: we remember and imagine not inert things, but things in motion. Moreover in memory their motion is represented as the same motion that occurred before. We reidentify not just Paul, but Paul performing: Paul arguing or Paul running then. Hobbes claimed that imagination and memory were a continuation of the motion of sense. He said that an object causes sensation in us by bringing about a motion in our organs of sense, and that this motion continues when the pressure of the object is removed, just as water continues rolling after the wind that moves it stops or after the paddle that strikes it is taken out. Imagination and memory, he said, are decaying sense. Hobbes is correct in stressing the mobility of imaginations and memories but incorrect in saying that the imagined or remembered motion is continuously the same as the initial parts of the motion we call sense. Hobbes does not describe correctly the form of sameness or identity that occurs here. What we remember is numerically the same motion we once perceived, not the same motion continued. Indeed only in memory can we have the same motion—as opposed to the same thing—appearing again; motions are riveted to their present and cannot be in another. Only memory presents a present again.

Thus in calendar time I can refer to the quarter hour from 1000 to 1015 hours on Monday, October 6, 1880, when I engaged in that heated public argument with Peter Smith; but in displaced time I can go over the scene again, catching snatches of its motion over and over again, each time having the same motion yet once more. Calendar time refers, displaced time represents. Calendar time refers to the clocking motions that framed the original process, it gives the time and date and then adds, "which is when X happened." Thus it refers to the event through the clocking motions that have been deposited

1 Thomas Hobbes, _Leviathan_, I, 2; _The Elements of Law_, I, 3, 1.

and settled into our records. But displaced, remembered time gives the "then" without the calendar frame; it represents what happened in its happening, not through its calendar. There will be occasions when we examine our calendar record and suddenly, reminded by what we find, fall into reminiscence about the events reported there; we then engage two sorts of time, the time of calendars and the time of displacement, of now and then, and all this occurs in the time of present, past, future. Phantasy, of course, is a calendar-free version of what happens in memory, and anticipation is a version which expects to be calendared.  

The past and future in the form of present, past, future, in clock time, are the immediately trailing or immediately coming numerated motions. The use of "past" and "future" in the form of now and then is at a greater distance. If we must displacify ourselves into them, they are neither continuous nor contiguous with the goings-on now. There is an interruption between them and what is happening now. The words "past" and "future," and even the words "now," "present," and "then," are used analogously in clock, calendar, and displacement time.

No one of these forms of timing can be said to be absolutely prior to the others. Each reaches its definition against the others. And there can be a condition of mind, and a level of being, in which the three forms are not to be distinctly differentiated, when for example a traumatic event cannot be let go as being only then and not now, when something going on now cannot be clearly enumerated into its partial motions or measured against the steady repetitions of a clock.
when we refer to events that cannot be placed in a calendar because their beginnings, ends, and differentiations are not contrasted enough one from another. What calendars, what before and after, can apply to what T. S. Eliot names when he says, “In my end is my beginning.” In what we could call mythical time, the processes we encounter are also not discretely differentiated into now and then, present, past, and future, and before and after, just as in mythical action an agent may not be clearly distinguished from his image or his name. Such temporal indifferentiation, such uncharted becoming, always lies as the matrix beneath and within the distinctions and numbers that make up the three forms of time.

If we did not enjoy the difference between now and then, it would not be possible for us to refer to another period in calendar time. The sense of “another temporal context” is originally given to us when we memorially or imaginatively place ourselves at a time, at a then, different from the one we are in now. Having sensed this difference, we can go a step farther and refer to the then without remembering or imagining it; and subsequently we can refer to a then that was never now for us, a remote past or future beyond our lifetime. This calendaring of time has an effect on our present involvement in motion and on our current clock time. It provides a more general context and more rigorous units by which we can clock our world and remember or anticipate our actions in it. The calendaring of time also has an impact on our differentiation of now and then; once we enter into calendars, we can remember with a more definite placement, since we realize that the then we are remembering can also be referred to through its time and its date.

V

There are motions and times that fall between the margins set by clock, calendar, and memorial time. Rhythmic motions, mythical time, and the right time for action are not reducible to the numbers of clocks and calendars or to the displacements of now and then.

Rhythmic motion comes between simple continuous motion and clocked or clocking motions. Continuous motion, such as the fall of an object in space, goes on with no sense of repetition: there is always

16 T. S. Eliot, East Coker (last line).
ternal" time of the motion can be richly and rigorously differentiated. The routine is to be followed exactly, with each part in its proper sequence. This train of partial motions inside a rhythm is an anticipation of the formal sequences we reach in clock time. The internal parts of rhythms thus anticipate clocking motions, while the repetition of rhythms anticipates memorial and calendar time.

Whereas rhythms are performances, myths are narrations. Myths are the discourses that clarify what rhythmic rituals are said to repeat; rituals "have" to be done because of necessities revealed in myths. Myths talk about the past, but it is not a calendared past: to want the date for what the myth describes betrays a fundamentalism which takes the mythical events as events to be framed by clocks and calendars. There is memory in myth, but the then it discloses is not simply the then of what I was doing earlier. It is rather a then that always was and always will be around: the events in a myth disclose necessities and exemplarities. Strife and justice, for example, did not begin at a certain date in the calendar; strife and justice always were and always are. Memory, Mnemosyne, as a possibility of being, does not begin at a measurable moment, nor does Eros. The archaic events, the beginnings described in myths, are not simply starts: they are the establishment of what always is. "One is always contemporary with a myth, during the time one repeats it or imitates the gestures of the mythic personages."17 This is so not because we project ourselves elsewhere, but because what the myth reveals is there always to be originated and revealed again. It is always at work.

We might think that we first establish our personal selves through memory and action, and then construct myths to help us deal with the world; but in fact it takes something of an effort on our part to distinguish, and to keep distinct, our own remembered past, with its capacity to be placed against clock and calendar time, from the

17 Mircea Eliade, Myths, Dreams, and Mysteries (New York: Harper and Row, 1967), p. 58. See also A. W. Reed, Aboriginal Legends. Animal Tales (Sydney: A. H. and A. W. Reed, 1978), p. 7: "Both men and animals were part of an endless Dreamtime that began with the deeds of totemic ancestors. Their deeds are part of life, and men are part of animals, as animals are of men. . . . In these Dreamtime tales, men and animals may change form one to the other, or share the form and nature of both." Reed speaks of "those who live close to nature in the ever-present Dreamtime." My thanks are due to Andrew Murray for bringing Reed's work to my attention.
ian way is to reduce it to something like the right time for adding eggs when one is baking a cake. We are not choosing and acting, we are serving when we perform in this way. Choice and action are precisely an intervention we make against the background of the natures of things, against the necessities and possibilities that are there apart from prior human decisions. When we choose we are under the sway of the way things are and the way they should be, not merely under the sway of what others have done; and in our actions and choices we define ourselves in relation to the way things are. To fit our performance simply under a goal set by another, or under a good sought by passion, is to obey a command, not to choose and to act. Clock and calendar time help us calculate and serve, but by themselves they do not disclose the right time to act. If they alone were sufficient, something like the astrologers' charts would be the best guide for success in life. But in fact recognizing the right time to act depends on the moral perception provided by virtue, the knowledge of natures and necessities provided by thought, and the appreciation, provided by moral imagination, that things can be better than they are.

The kind of calculative time used in science, furthermore, does not aim at shedding light on the particular situations in which we find ourselves. The form of time used in scientific analysis, a form that combines digital-clock time in experiments and calendar time in reports, puts us at a distance from the motions and things we talk about in our science. It does not allow us to discuss the situated time in which we must act, and does not even clarify the situated time in which we carry out scientific experiments and state scientific truth. To cultivate the habit of calculation does not as such make us fit to choose; to figure the correct time of something is not to know the right time for something.

Finally, knowing the right time and knowing what is the good thing to do are made possible by rhythmic practice. We do not begin suddenly to choose and to act; initially we do things in imitation and in assimilation of the behavior of others. We imitate simply because we want "to do that too," not for any utilitarian purpose. Rhythmic repetition is the runway for action. When we gradually introduce our own clocking and calendars, our own understanding of how things have to be, our own appraisal of what is going on in the situation we are in and what can be done about it, when we gradually appreciate that what we do now will be with us later, just as what we did then is still with us now, we then acquire enough distance to see contrasts between things and their shadows, between here and there and now and then, and at that point the choices become ours.

VI

There is a sense of "now" that cuts deeper than the now in the memorial or imaginative now and then, deeper also than the present of clock time. The word "now" can be more reflexive than either of these two forms of self-reference permit.

In clock time, "the present" refers to the unit of clocking motion—the sweep of the second hand, the fall of sand—that is going on. But even in such clock time, we must distinguish between:

1. having the present motion (having the fifth sweep of the second hand in the fourteenth hour of October 5, 1981), and
2. having this sweep as now.

What is the difference between:

1. having the actual motion and giving it its number, and
2. having it as now?

What is the difference between:

1. being, now, the actual and fifth sweep of the second hand, and
2. being the present motion?

It is hard for us to get at the "being present" or the "being now" or the "having as now." When we try to get at this we almost always are deflected into something less final, into the motion which is present or into the having of the motion which is present. It is as though we wanted to get at our eyeglasses but always were deflected toward what we see through them. Whenever we try to get at what it is to be in the present, we slip into getting the motions that are present.

It is not just that we get "external" motions, like the motions of a second hand or the flow of water instead of "being now." We may also try to find an "internal" motion to show us what "being now" means. We may turn to psychological processes and take them as the motions for a kind of universal and ultimate clock. We may, insidiously, take our short sweeps of attention as the determination of what it is to be now. Here we focus on the having of something pres-
ent. But this maneuver is inadequate: it does not clarify what it means to have something as now or as present; and it does not clarify how the having is itself now and present. It does not clarify how we have the having as present. This maneuver toward an internal motion amounts to taking ourselves as being spotted and being measured, in our motions, by someone else. It looks like the decisive and final maneuver, the catching of our present, but it is not. What else are we supposed to do?

The structure of remembering may bring out more clearly what we are after. In remembering we now remember ourselves as doing something or experiencing something then. The then was then a now, one different from the now in which we remember. This structure makes us notice the peculiarity of being now. Thus while we remember, our attention is primarily drawn to the motions remembered—to the baseball game, to the boat ride; it is marginally drawn to the “motion” of our experience then—to our watching the game, to our feeling the boat move; but it is also, somewhat explicitly, drawn to the “thenness” of the motion and the experience. The then of that makes us aware, by a kind of contrast, of the being now that will later be a then. It makes us aware that the then of the past once was now. Thus memory gives us the then, but it also gives us an inking of the now. It is in the space of such differences that we are to look for what it is to be now.

The now that we are trying to get to is often expressed symbolically in myths that speak about the origins of the world. The beginning, the eternal awakening they speak of, is not a start in the past once and for all, but the perpetual upsurge of things as time moves on. In reading stories about this we appreciate that they do not describe any mundane process or any particular psychic experience, but something underlying every experience and every motion, the elusive origin and passage of time. Myths can thus help us direct our attention toward what we are trying to describe philosophically. We may also have an inking of this final form of time when we recognize the right time to act or to choose. What we are now after is deeper than moral timing, but we get hints of its immediacy and irreplaceability in our experience of the moment for action.

Calendar time seems to draw us away from the peculiarity and the priority of the final sense of “now.” We seem to be able to refer to any and all epochs of nature and history, all at a distance from us. Our present station seems quite unprivileged, flattened out with all

the rest. Calendar time seems to place us in what has been called a block universe, one in which becoming is not a real dimension. But even in calendar time we dare not overlook the now in which we execute our calendric reference. That activity at least, and the now in which it occurs, is not just one more of the calendrical motions and dates, not if we want to catch it in its original form. We have to stand somewhere, somehow, if we are to pretend to scan everywhere.

There are two approaches we must use to get to the form of “now” we are now describing, the form that Husserl called “the consciousness of inner-time.” (A) One approach is the one we have been using: listing some hints, contrasts, and leads in clock, memorial, mythical, moral, and calendar time that point toward it. (B) The second approach is to observe that the form of “time” we are after straddles the difference between continuous and discrete changes. It would, for example, underlie both the sweep of a second hand and the flip of a number on a digital clock. It is therefore neither a continuous motion nor an instantaneous change, but it is related to both in regard to their being timed. (The difference between continuous motions and discrete changes has to be kept alive. There is a temptation for us to think of our clocking motions get shorter, they become discrete clicks; or that our psychological experience of time introduces clicks while the world has only sweeps. But both clicks and sweeps have to be preserved, and the level of timing we are after now has to let them be preserved; it cannot itself be either of them.)

Memory and imagination give us a sense of the strangeness of the identity of a moment in time. Suppose I am involved in a difficult interview. First I anticipate it and rehearse it in imagination; then I go through it; then I remember it over and over again. I have various slants not only on the interview as a process, not only on the persons and places involved in it (I could always go back and see them again bodily), but also on the “being now” of the interview and of me in it. I anticipate, go through, and remember that also, however marginally. That “being now” seems so empty and so formal (in contrast to the interview as a motion and the people and places involved in it; they are “stuffed” with content and easy to differentiate one from another). And despite seeming so empty, that “being now” is different from the “being now” in which I remember or anticipate. How can there be so many of them when they seem so much alike? Each is differentiated from the others not just by what goes on or
happens in it (something very different could have happened, with different ingredients, and the same then—"that now"—would still have occurred). How are the now's different from one another?

The issue is sharpened because we do not need the distance of memory and imagination to discover sameness and difference in being now; a rapid othering takes place right now. It seems both continuous (uninterrupted) and discrete (each part is abruptly over as the next begins). It seems to be like one of those strange mathematical curves that has a sharp corner at every point. We must clarify how this going on of the now can be beyond both the continuous and the discrete, and also clarify how it can be the final margin, the final form, not to be located in any further "when"

VII

Our issue can be clarified by being expanded. Instead of speaking about the now, it would be better to speak about succession. Besides the things that endure, besides the motions that go on, besides the changes that happen, there is also, simply, succession. Succession is not a thing, not a motion, not a change: like the now, it is on the margin of all of these. Even if one were to say, in an attempt to define cosmological time, that the universe is made up of static states that follow one another, the succession of such states is itself not one of the states. And although succession is marginal to things, motions, and changes, it could not be without them: it is a dimension belonging with them, even though it is not equivalent to them.

To speak about succession gets us away from thinking about the final now as a kind of contact lens, a rigid entity with the tabs of anticipation and primal memory attached. It gets us away from thinking about a now-point with extensions into the immediate future and immediate past. Even Husserl's subtle analysis of the now-point and of protention and retention imposes such a misleading image, and turning to succession instead of speaking about the now can help us formulate the issue more adequately. Succession is the whole within which the marginal now is to be placed. However we must avoid projecting the now into succession as though the now were a small version of the kind of present motion that is used in clocking. Succession does not contain enumerable parts, "now's," the way a clocking motion contains parts: the motion being counted now, the motions already enumerated, the motions still coming. Succession has to have something like parts, but they must be worked out on their own terms.

And somehow or other we have to formulate how there can be a difference between this succession and that succession. We also have to show how several of us can be engaged in the same succession, and how several motions can occur simultaneously in the same succession. How do sameness and otherness work in regard to succession? Succession, furthermore, straddles both the subjective and the objective, the domain of minding and the domain of things. It straddles the continuous and the discrete and lets each of them be what it is: it is itself neither continuous nor discrete, but it appears like something continuous when it underlies a discrete change, and like something discrete when it underlies a continuous motion or rest. It lets there be othering and parts in a continuity, even if the continuity goes on with no perceptible change whatever; and it lets there be a context, an encasing sameness, for the discrete.

But the most perplexing issue in regard to succession is that there is a difference between this succession and that one: not between this succession here and that one there, since two spatially separated successions really are only one, even allowing some of the difficulties introduced by the theory of relativity; but between this succession "now" and that succession "then." This difference implies that we have not reached the end of analysis when we move from things, through motions, rests, and changes, to successions. Successions themselves succeed. But successions are not motions, changes, or rests, so we cannot say successions themselves move, nor can we say they themselves are subject to succession. We will therefore modify the word we use to name them and say that they succeed.

Now this success is simply the form of succession, and we cannot say about it that it in turn is differentiated into this success and that success. Success, the form of succession, is always the same, what-

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88 Some peculiarities of succession are mentioned by Husserl in Zur Phaenomenologie des inneren Zeitbewusstseins, pp. 370–71.
89 G. J. Whitrow, The Natural Philosophy of Time, p. 292: "Time is not itself a process in time... The happening of an event is not itself a further event."
ever “same” may mean here and whatever sense of “other” can be played off against it. 

Analysis thus requires that we work out the contrasts and identities, the metaphors and the descriptions, that will bring out both success and succession, and will show their differences with and their relationships to things, motions, and changes; to thoughts, feelings, and perceptions; to numbers, equations, and spaces. But this effort is not merely analytical, not merely mathematical: since the succeeding in question is the equivalent of Plato’s One and Indeterminate Dyad, it is also the origin of the goodness we find in things and the elegance we admire in them. Our analysis is therefore a reminder that the point of all timing is success.

The Catholic University of America

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It is what, in Husserlian terminology, we might call “the form of inner time-consciousness” (as opposed to “inner time-consciousness”), but we wish to avoid the intensely introspective tone of Husserl’s terms. He once speaks of it as “Vorstufe der Zeit als Keuxistenzform” (MS, C, 7, I, p. 17; see Klaus Held, Lebendige Gegenwart [The Hague: Nijhoff, 1966], p. 118). Husserl also often refers to this as the form of *nunca stans*. See Held, pp. 118–18, 128–37. Other passages in Husserl’s manuscripts in which this form is mentioned are: C, 2, I, p. 15 (“stehendes und bleibendes Urjetzt als starre Form”); C, 3, III, p. 25, p. 28, p. 36; C, 3, I, p. 34; C, 7, II, p. 18; C, 16, p. 24 (“mein urzeitliches Nicht-ich als Urform der Zeit”); C, 15, pp. 2–3; C, 16, p. 17; C, 17, III, p. 15. A special question related to the form of succession is how we as persons and human beings identify with “our” form of succession. I wish to thank Thomas Prufer and John Brough for help with this essay.