

CHAPTER IV-B: TIME: EN#2 AND EN#3, OCCURRING AND IMPLYING

To develop our model of time, we have to relate **occurring** and **implying** to **en#2** and **en#3**, and the **body**, so that time can emerge from these. It may seem that the present is in the term "occurring" and the future in "implying." The present also seems to be in "en#2," and the past in "en#3." The body is each of these in some way. Present, future and past will be quite different than in the old model, if we conceptualize time from these terms.

Let me first repeat that I-V is our **general model**, an alternative to the one that seems to inhere in most current concepts. Later, in VI-VIII we will develop specific terms for behavior, perception, and human processes. Since thinking and model-building are human processes, of course we **use** our human processes to build our model. Mathematics is a very human process but we have not chosen it to begin our model. I have shown that such a model must drop out much of what is most important to living things. Let us choose something else from our human process to begin with. Here we **chose** to put occurring and implying first in our model, and we will derive perception and objects from these. We put occurring into implying (carrying forward) at the start, and these will inhere in all the other terms. Space, time, and perception are derivative from them. The body and its environment as one **interaction** is prior in our model. From this we can derive separate individual things and units.

So far we do not have terms in our model for a space in which objects **appear** in or to the process. Of course we who are building the model have space and perceive objects. We have chosen to build our model so as not to begin with those, knowing that we will later develop terms for such objects, since we can speak-from our own having of them. But in our basic model there are objects only while missing. When they occur and carry the process forward, they are no longer objects. The process **has** as yet no representation of time in which it appears to itself to be going on. Of course we could say that carrying "forward" involves linear time. But linear time is a thin and simplified derivative from process. Many aspects of humans, animals, and modern physics and biology cannot be thought about at all if everything is considered to happen in simple linear time. Instead, let us see what more intricate kind of time we can derive from our model and from our familiar human process.

In the old model everything only **happens to** something; nothing

has a process that it implies and enacts. In our model we have emphasized the kind of "occurring into" implying which carries the body's own implying forward so that it enacts it's own sequence. Of course we made room from the start also for events that "occur into" implying without carrying it forward (e.g., the tree that falls on the beaver). For us the primary distinction is between the carrying forward and not carrying forward. That determines whether the events are the body's own process or not. It makes no difference whether the spectator would say that some event is the environment's action on the body, or the body's action on the environment. For example, the responses of other species members or the arrival of food may seem to be something that **happens to** the body, but our model says that these are the body's own process and carry it forward. On the other hand the animal might trip and fall, which might seem like the body's action but we would deny that it is the body's own occurring-into-its-impling.

Since there is implying, we can ask whether what occurs into it carries the implying forward or not. All occurring **happens into** an implying, but only some of it carries the process forward. What the spectator would consider a surprising new event may also carry the implying forward. Impling is more finely organized than any one set of occurrences.

We do not begin with living bodies as separate objects in the (spectator's) environment. For example, many body-parts have internal environments. On the other hand, a newborn infant's body implies the mother's breast, and the mother's body implies the sucking infant. If the infant doesn't come, the breast becomes impacted and has to be pumped. The single nursing sequence requires actions by each of them to carry the implying forward. Each is the en for the other; both are "the body" and "the environment." In our model there is as yet no space for separable already-built bodies (en#3) apart from their being-gone-on as the ongoing en#2.

Although the spectator thinks of most sequences as repetitious, I have argued that repetition depends on someone comparing the sequence to a previous one. Internally the process occurs freshly. Occurring into implying is a change. From the change process we can derive sameness and repetition as a special kind of change.

Impling is always part of some occurring; occurring always includes an implying. They cannot be separated. We have to take all occurring as occurring into implying. "Occurring into implying" is a single term. It may carry the implying forward. "Carrying forward" is a single term too.

Implying and occurring are two strands of bodily process. Notice, please: They are not three. Don't add the past. Implying may be some sort of future and occurring some sort of present, but let us allow our conception of time to develop from these concepts. Then we will see that these are not the usual kind of future and present, and we will also see that the past is something else (although it functions in these two).

But since implying is part of occurring, it seems to follow that what is implied must be occurring. But it does not occur; it is only carried or carried forward by what does occur. The implying is part of occurring, but what is implied is not occurring.

What is implied is not the next occurring either. Implying is more intricate than any one occurring. Therefore implying is not "the future" in the sense of what will occur. It is more intricately ordered than an occurring can be, and yet it is also incomplete. As with the lamb at the cliff, the body's own sequence carries the implying forward if the body-en-occurring "was" implied. But there is no separate record of what the implying "was." Internal to the process, the implying does not stay; it does not become past. Implying cannot become past, (except on someone's record).

In the linear model the past, present, and future are determined by their positions on a time-line. Except for their position the three are the same. From how an event is described and defined in the old model photo you cannot tell whether it is past, present or future. (Kant said that the time of an event is not written on it.) In the old model past present and future differ only in regard to their position. In the model developing here, past, present, and future are very different.

We are serious about deriving present, past, and future from how they function differently. We are not taking them primarily as positions.

Something is past, future, or present depending on how it functions in occurring into implying. (This past and this future are the internal continuity of a body's own process.)

The implying doesn't become past, as we might think, if we assume the linear time in which someone might remember. Within our model the implying is changed if the process is carried forward, but it always remains a part of the ongoing occurring.

If there were no ongoing implying, there would be nothing about an occurrence that had to do with other occurrences. If each occurrence were purely present, it would be just only itself, without its

own continuity, order, and connections. Of course this kind of pure present is artificial. All its internal connections are taken out. Then they are lodged in an external observer. As Kant said, an observer must relate events by remembering and bringing the past **to** the present. If you didn't remember the last "1" when you count, you would not get 1, 2, 3, 4 but only 1, 1, 1, 1. So we see that if we make linear time prior, we cut artificially cut everything into positional units and we make it impossible for anything to have its own activity. Perhaps not everything does have its own activity, but why decide from the start to adopt a model in which we shall never be able to think about anything that has its own activity?

"Its own activity" -- that means it has its own implying **into which** it occurs. "Its own activity" means "carrying forward." It is our starting distinction between events that do and those that do not. "It's own activity" is always both occurring and implying.

If we live with plants and animals, we can see that some things have their own activity. We tend to fall into a city philosophy, just humans and stones. Then it can seem that only the "speech community" "assigns" meanings to meaningless objects, as Brandom¹¹ characterizes "enlightenment thought." But since we find ourselves in the continuum of living things, we cannot avoid noticing that other creatures also "assign" (feel, are, imply, enact) meaning and generate time (and that we feel, are, imply, enact) like them. So we have every reason to build a model in which we can think about something that is its own activity. Later we can limit some things, if we find some that do not.

If we let our model be the wider one first, we can generate terms for behavior and human processes, as well as for fossils that are now in the rocks, the kind of time that paleontologists tell us about. We will generate terms to say how humans **have** (project, feel, live in). time in a way animals don't, and how animals feel afraid in ways plants probably don't. But let us first permit a time that is not an imagined future or a memory of the past.

So for example, there is a past in a plant not because someone remembers it, but because what occurs includes (incorporates, employs, regenerates lives) its body-en#3 which is the product of what we (in remembered or imagined time) call its "earlier" process. But the en#3-body in which the plant lives is not a separate and remembered past. It is the regenerated body now. We have both kinds of past, but in us also the capacity to have memories depends on our bodies being our regenerated past. Our memories are not floating pictures or separated records; they can form for us only

because **our present human bodies are physically also the past.**

If I have amnesia because someone hit me on the head and stole my wallet and identity cards while I am visiting in California, and if I make a new life there under a different name -- what determines that I have not lost my past?

The past **is** the body. It carries the scars of my childhood cuts. It has the hangover from last night. It has (is) my past experiences and those of the race and the species. With similar people I would make life-mistakes similar to those I make here. Bodily processes do not occur only "in" the body (one says) as if it were a static receptacle, an old stage for new events. Most of the body must constantly be regenerated freshly. It begins to disintegrate the moment circulation stops. Hair and bones last longer. There are various degrees of preservability of various part in artificial environments without bacteria, like alcohol. In living the body keeps being regenerated. From death on, a different kind of change no longer makes it "the same."

Our concepts of process can derive how something is made to stay "the same," seemingly just lasting in time. The changing body generates the time in which it remakes itself as "the same." The body does not only last in a remembered and compared time. It does not simply last. It does so first and foremost in the time which its own changing generates.

The past is gone on in, as one might go on in a situation, in an argument, or in a play. It can only be done by taking the past along and changing it, like the present sentence or an action does. The past is in a present occurring; it is a change of the situation **in** which one acts. En #3 is not only the body but the whole home-made environment. When we act in a situation, we remake it, but not into some other situation. No, a good action "saves the situation." It is still that "same" one, but not because it hasn't changed. Rather, like a human institution (for example, the University of Chicago since 1890) it keeps being the same although with new people who are newly and differently doing "the same" functions. And this is true also of the buildings which are maintained by the janitors, and rebuilt periodically.

We saw that there are degrees of separability of en#3: the beaver's felled tree, the university's buildings, the mollusk's shell as long as it lives in it, our hair, a person's clothes and house. But right now in our merely "basic" model we do not as yet have terms for those complex things, just a process that generates the kind of time in which they will be possible.

As en#3 the body must be lived on as en#2. Its "past" cannot be separate or static. Unlike a machine such as an automobile, the body

cannot be kept dry and oiled on four bricks in a garage without running. If the body doesn't "run," it dies and disintegrates. Without an ongoing process you don't have the body either. This remarkable fact tells us that present processing remakes the body as a product, and that this is different than something we **make**, for example a machine or a chair. If we are fixing the car or reupholstering a chair, we can either finish the job, or stop in midst. We can leave the chair half done for a while. **The life-process for which we are building a conceptual model cannot stop for a while.** Human making is a very different kind of process.¹²

En#3 is **constantly** regenerated; the body cannot be only en#3. It has to be changing -- it has to be an existing thing, a concreteness, a kind of present.

This last can be said also of the chair being reupholstered -- the past is here as the existing chair, and it is being reupholstered and changed. **But, in the chair, these two aspects can fall apart.** The upholsterer can stop working for a time, or indefinitely; the chair will last. In the living body these two aspects stay together, and if they don't--if the present changing stops, the past's product also disintegrates, or changes very greatly. **The past en#3 body disintegrates if it is not gone on in as en#2.**

We want to develop the concepts of en#2 and en#3 so that this remarkable fact will emerge clearly. We want to develop them so that it becomes **derivable** from them. We can say that present process goes on in the body, and also that the body is in process. (As we saw earlier, the word "in" can be used in either way.)

The present process goes on in the en#3 body which it has regenerated and altered. That is why in h-3 we said that the present occurs in the sbsed past, not the already-gone past. A process is a regenerating en#3. It goes on in its en#3. We say the same thing, but it sounds odd, if we say: the process goes the en#3 on. "Going on" is a transitive phrase; it means going it on. The process goes the en#3-body onward. It sounds all right if we say that the present goes on "In the context of" the past, but we have to mean the context it regenerates. **The process goes on -- not in the context that was (and isn't here to be gone on in), but -- in the context that is changed by the it.** This principle will have many uses.

For example, reflection and explication are often considered as if they were a mere looking back, as if the past remained there to be looked back to. Later we will derive memory, but of course memory is possible only because of the occurring body. So it is possible only because the actually occurring body is a regenerating (or going on)

what it was. This understanding of reflection and reflexivity will often turn out to be quite vital.

The other direction of "in" comes to the same thing: The past body **functions** in the present. "To function in" means to be changed. Something changes when it functions in the formation of something else. We saw this in the case of metaphor. "Sbs" was our concept for it (IVAh). It does not function as itself, but as already schematized by its role in shaping the present. **How the past can function in the present can far exceed what it was in its linear time position or on someone's record.**

The pastness of past experience is this kind of functioning. Therefore en#3 is not just the past, not gone, but **gone on by** a present process; (not the past context but the one that is regenerated by the present process that goes it on.)

The present process goes on in the en#3 body, but it would be foolish to say that the present process goes on in the past! The en#3 body is the one that is gone on in the present.

At the end of IVA we spoke of a "past" that is "**sbsed**." Sbs requires no record. The sbsed past does not occur separately, not even on a record. It is only the fact that what does occur would not be as it is if it the past did not **play a role in the formation of what does occur.**

For example, many strands of your past are part of what is happening now, quite without memories. The past is always involved in the very texture of the present. It is the **now-sbsed** past. If the past is considered only as the unchangeable events of the linear past, one cannot conceptualize many important human phenomena. The presently gone-on-in past is capable of much more than the fixed-photographed past on a record. No, we need to derive the linear recorded past from the body's own process (of which it is a simplification).

En#3 functions as **a past in the present.** We are going to need this concept. And implying is **a future that is in the present.** But if past and future are in the present occurring, we seem to have concluded just what we didn't want: the present complete and self-sufficient so that really there is no time, only certain aspects of present functioning. It might seem as if this present has no connection to the future that is not yet, and to the past that no longer exists.

No, there is a connection. Later we will develop the ways in which a body can remember and can have those connections. But before more terms develop, we can assert the connection only from

the outside, as spectators. What is no longer happening is connected to this very different newly sbsed en#3-past which functions as part of the ongoing body. And what will happen -- when it happens -- will happen into this ongoing implying. But what will happen is not the implying, and what no longer happens is retained only as it functions now.

For example: What a historical event really **was** becomes retroactively determined by how subsequent events develop its significance. The Bosnian war is part of what the Fall of the Austrian Empire "was." The event of its fall is sbsed by current events. Somewhat differently, we need our model to let us think about how our present living can change the past; we need to be able to ask: what sort of living changes the past, and what sort does not? How a person's past is sbsed is not quite how historical events do it. And our model develops retroactively in still another way. But all these differ from how the Soviet Encyclopedia does it -- by lying. These distinctions require later specifications, but we will be able to make them because our "basic" model is capable of a past-In-the-present, rather than framing everything within the kind of time that consists only of cuts between different linear positions.

The en#3-past and the en#2-present are **interlocking terms**. An event (an occurring) involves both; they are not two events together. The body is both en#3 and en#2, but not by being two bodies together. Going-on is not half an event; it is already the whole event. What is gone-on (the sbsed en#3-past) is that very same whole event.

This defines "interlocking terms." Clearly when two terms are interlocking, they are not the same. They are two different strands of one interaction process.

The #3-past that is gone-on by life does not last in the way that an empty sea shell lasts. It may take years to dissolve in the ocean, but that is a time which the shell does not generate. The slow water wearing holes in the shell is not the animal's own change. There is no implying of these holes in the living mollusk. A past alone in alcohol does not generate the animal's time. How inanimate processes generate time is different, but they too generate time. Our model has greater capacities for new concepts concerning those (See CRL and footnote #8.) Let us not assume that they can happen only within the already generated static positional time of observers.

We have been discussing the interlocked past and present.

The present has an interlocking relation also with the future (the implying) but we have already shown that implying is not the linear future that is about to be the present, and then becomes the past. The

implying is not the occurring that is about to be, and it does not become an implying that was. We derive a more intricate future from how implying functions in the process.

When occurring carries forward, the occurring is a change in the implying.

The body that occurs **is** this changing of the implying. So we cannot say that the implying will be **carried out** (enacted, occurred) by the next occurring, rather it will be **carried forward**. Occurring changes implying into a different implying. Since the whole sequence is implied in any occurring, and since it is implied with a different "next" at each point (as in the example with our spider), the sequence is new at each point, however many times the spectator has seen it.

The findings of modern physics show that **actual happenings can generate their own space-time system and their own new system of "antecedent" possibilities "retroactively" from the event** (See CRL). There have been no good conceptual models for this. The concepts we are developing may help with this problem.

Later we will generate the observer patterns, but our model must first let us think about how a process has its own implying of its own changing sequence. In such a sequence events (interactions) cannot happen singly. Occurring **is** a happening-into the **changed** implying of which it is the changing. This is a different kind of continuity. Mathematical space has no gaps either. But its continuity is made by the mere fact that any two points no matter how close still have an infinity of points between. Yet each infinitesimal point is supposed to sit by itself, without its own relations to other points (the observers adds the relations). Only momentum is the parameter that gets at the active continuity of the motion, but momentum is what you can measure only if you give up on a space-time point-location system that stays the same across the change.

From momentum we can see that inanimate processes also have a continuity of occurring, and a kind of future that functions in the occurring, and is not merely the continuity of pre-defined positions in an imagined space or time.

In the old physics it was said that a moving body "has" momentum. The body could stop and be the same body without momentum. Currently in physics this does not work. In our model, the body **is** an implying that its occurring is changing, so it cannot stop and be the "same" body.

We already saw that the process cannot stop as if the body could

just be the en#3-body. The en#3-body is interlockingly one event with its occurring. Now we see that the body's occurring is also interlocked with the implying into which it happens, and of which it is the changing. Occurring is both, but let us be careful not to merge and identify the two interlocks. They function very differently and we are deriving time from how they function.

The body occurs in and as the en. The sbsed body-en#3-past is the environmentally occurring body. On the other hand, the implying is not = en, not what occurs (it is only carried or carried forward by the occurring).

For example, hunger implies something like feeding. But the feeding is not occurring. In hunger the feeding is not occurring in some implicit, hidden way. Hunger is not hidden feeding. Hunger is an actual occurring, but it is quite different than feeding. If it goes on for long it involves large changes (belly swelling up, for example) which are nothing like the changes that constitute feeding. The sbsed en#3 body is the one that occurs. The implied body is not. The implied body is both much more than any occurring, and also not what occurs.

When we come to derive concepts for human processes it will help us that our model can conceptualize even dramatic and ugly looking pathological conditions (like the belly swelling up in hunger) as the implying of a missing process-resumption that would be quite healthy. Pathological occurrences may carry a quite positive implying (which it keeps unchanged).

What is implicit can never be the same as an explicit occurrence. Implying is never what explicitly occurs. Implying has all the intricacy of occurring, all the intricacy of what has ever occurred, but it is **more intricate order**. Since it is carried by the occurring, we can also say that occurring is always more intricate than what it is explicitly. Since it carries implying, more is happening than what has happened.

What occurs is a new formation whether familiar to the observer or unusual. Eating is familiar to the observer, but intravenous feeding also carries the process forward. A wonderful variety of modes of feeding is found in nature. **The implying implies "some way" of carrying forward, not any one way.** What carries forward in the "usual" process is just as new to the implying as intravenous feeding. Implying is always open, and what occurs into it does not equal it. The spectator's usual observation makes the implying seem poor. When something healing and creative happens, we may quite rightly say that this is even more truly what the implying "**was**," than the usual occurrence.¹³

From this we can see again that **what** is implied is not just one occurrence. "It" is not a single it, but a more intricate order than what can occur in the en. But implying is always unfinished. The novelty happens as en happens into the implying. The new step is indeed implied, but it does not exist in the implying.

The new step does not exist in the implying. It does not exist until en happens into the implying and carries it forward. It is generated only as en carries the implying forward.

What functions as we just set out can be called "the future." It functions more intricately than the linear future. By simplifying we can easily derive the linear future from it, later when we have terms for remembering and imagining, and for **having** time.

Carrying forward changes the implying so that it is no longer implied because **what "was implied" has occurred**. But, since implying is not the occurring, we had better say: There is carrying forward when what has occurred "was" implied. The implying is not the occurring which "was implied" until the en happens into it and carries it forward.

One major distinction has been with us all along: Much can happen to a body that does not carry its implying forward. The tree that the beaver gnawed down can be distinguished from a tree that falls on the beaver. The latter is like the ocean water wearing down the sea shell -- it is not implied by the mollusk's body. Unless such an event kills the animal, it does not change the implying. What was implied as the next event will still be implied as the next event.

We call it carrying forward when what occurs changes the implying so that what was implied is no longer implied because "it" has occurred.

Occurring regenerates the body-en#3 and it is also a change in the implying. How the en#3 body functions is the past. How implying functions is the future. **Occurring changes the past and the future.**

Even if we were tempted to put linear time around all this (instead of within it) we could not say that there is a bit of implying between each occurring and the next. We have also already shown that implying as such does not take up time. So implying is in the occurring, not between occurings.

In terms of linear time we would ask: Which implying is "now" being occurred into and changed? Is it the "previous" or the "next" one? In positional time the implying would be viewed as if it were itself an occurring that happened before each occurring. So there would be a distinction -- a positional distinction -- between a previous implying

and this one, and again between this one and the next. Occurring would occur into the previous to change it into this one, and another occurring would happen into this one to change it into the next implying.

That would lose the whole point of the concept of implying, since it would function like a present, and nothing would function as a future.

The continuity of time cannot first be made by things next to each other, because such a continuity is passive; each bit **is** alone, and must depend on some other continuity to relate it to what is next to it. So the implying of the next event cannot be just before the next occurring; it cannot be merely next to it. The implying must be **in** the occurring event. But someone is still sure to ask: Which implying is in the occurring, the last or the next? Or this one?

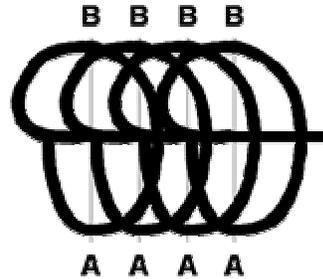
But now it is clear: **In the time of carrying forward it is a wrong distinction to want to divide between the last and the next implying.**

This is also the relation when we say that explication is not a representation of what "was" implicit; rather explication carries the implying with it and carries it forward. An explication does not replace what it explicates. If one divided them, one could try to divide between what is new and what is from before. Then one part of the explication would be representational, and the other part would be arbitrary. But explicating involves the continuing function of the implicit, carried (forward) by the explication. To explicate is to carry the implying forward, and not just once but on and on, through cycles and series. An occurring that carries forward is an **explicating**. It is neither the same nor just different. What is the same cannot be divided from what is different. The present cannot be divided off by itself alone. Time cannot be divided off from events, as if abstracted time relations subsisted alone, and events only accidentally happened to come into time-relation. Time is an aspect of events. "The present" means the occurring into implying and the going in en#3. It cannot be divided from them.¹⁴

We see this as "retroactive time" if we begin with the linear order. But the occurring need not go **back** in linear time to reach an implying that "was." It is only the scheme of linear time which leaves the "previous" implying behind at an earlier position, so that the occurring has to go back to it, in order to go forward in it. But the implying is not left behind in a linear series; it is always the future that is now.

In terms of linear time the "line" seems to move **both** forward and back behind itself.

In the diagram points A and B occur at the same linear time point. Linear time would be going both forward and back behind itself to bring the last implying forward.



But if we put the successive cycles contiguously, they become a stripe, a rod or a pipe, so that the points on the spiral seem to occur at a linear time point.



When it looks like a pipe one can consider it as a straight line. But that would cover up "occurring into" and "carrying forward."

From our point of view time is not retroactive - - it is an aspect of the carrying forward process. We can derive special models for linear time, repetitious units, various kinds of logic. We can suit specific models to specific empirical contexts; their narrower scope need not limit us if we derive them within our wider model.

In ECM, IVB2a (under "the multischematic character of experience") there is a section called "Experience is time-inclusive." I show that "temporal schemes are merely one group of very many kinds of schemes that can be aspects of experience." I must refer to that longer discussion which requires that whole chapter. Here I will

just assert that time is not necessarily the prior condition that so many philosophers have considered it to be. The priority comes to time and space because most philosophers have considered experience to be primarily perception. Then percepts seem just to be there, with space and succession as their prior conditions. But even perception cannot give just one **scheme** of time.

Our conceptual model has developed this scheme of time (derived from carrying forward) before we derive perception and the kind of time a sentient creature can **have** (feel, project, sense itself in).

The terms "implying" and "occurring" together have led to "recognize," "carrying forward," "feedback," "evening," sbs," and we could use them to talk about metaphor, ECM's "comprehension," and "crossing," and as we will soon see, much else.

Our alternative "basic" model needs one more section. We need more terms for how the environment occurs into the implying. We turn to this now, in section V.