A CHANGED GROUND FOR PRECISE COGNITION

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In this article I will argue that there is <u>an implicit kind of precision</u> different from the logical but not unrelated. The two kinds have to be kept separate. The power of logical inference depends on the concepts' own patterns and would be lost if they were mixed with something implicit. So we must keep the concepts' own patterned form, and return to them if we also employ something implicit.

What is currently called the "background" appears to be vague and peripheral but I will show that it is <u>a more precise kind of order</u>. It functions in the formation of new and ever more precise scientific concepts. It has an implicit precision which we constantly use, but in an unavowed way.

When we examine the implicit precision, we will become able to use it deliberately and systematically with great advantages for logical analysis as well as for a wider kind of thinking. This article will make the implicit kind of precision visible, explain how it enables new logical concepts to come, and discuss its wider import.

SECTION I. TWO KINDS OF PRECISION

<u>I-1</u>) The "background" is implicit *in* the figure:

Currently the background is portrayed as vague, peripheral, unconscious, without thinking, lacking precise "figures," a "holistic" merger suggesting anything but precision. The background is known chiefly by what it is not: <u>not</u> conscious, <u>not</u> precise, <u>not</u> logical, <u>not</u> capable of being stated, <u>not</u> clear.

But those who point to the background don't mean these negatives. We assert something positive and valuable, not a hopeless dead end. The negative terms are used because there has been no vocabulary to say what we want to say. Of course we know what we mean, but we cannot communicate or think further from statements that deny what we mean. I offer a new kind of terms in which we can say how the background we are discussing actually functions in our speaking and thinking. I will show how new terms can be made.

I ask my readers: Please don't just agree. The new terms generate <u>a new model</u> in which we can say what we mean. Please notice the new model.

Currently we are said to be "unconscious" of the background. We can drive the car "unconsciously" while attending to other thoughts. But we don't mean that we could drive if we were unconscious from a blow on the head. The background is not unconscious, but we need new terms to define "consciousness" as vastly wider than the narrow scope of attention.

And, our "background" is not just vague. We could not drive without attention if what

functions were only a vague, peripheral knowledge of driving. Actually <u>each detail</u> of knowing how to drive functions <u>precisely</u>. So we do not mean what the word "background" currently says.

The word "background" invokes the figure/ground metaphor according to which the figure appears by contrast with its background. The figure would disappear if the background had the same color and texture. The visual background is <u>around</u> the figure; it occupies a different space than the figure. But this is not how the "background" of cognition functions. The background we are talking about doesn't function like the background in the figure/ground relation.

We can examine <u>what we want to mean</u> by "background" if we examine how it functions <u>in our actual speaking and thinking</u>. Let me point out one strand of meaning in <u>our</u> use of the word "background:"

Suppose I am trying to read a technical article in a field with which I am not familiar. Then I could say, "I don't understand the article because I lack the background." This strand of meaning is also intended, for example, if I open a new book in the middle and read a page. I would not understand it as I would if I had read the book from the beginning. Or, if I join an ongoing conversation in the middle, I won't fully understand what people are saying.

From these examples we can see that by "background" we mean what functions <u>in</u> the understanding of a present event. Our "background" <u>is not</u> on other pages or at an earlier time, but rather how "all that" functions <u>in</u> our understanding of <u>this</u> page or <u>this</u> remark, now. If we call what is before us a "figure," then this background is <u>in</u> this figure, not around it. Our figure and background are not next to each other. <u>Our background does not have a different time and space location of its own</u>.

What happened earlier happened bit by bit, one event at a time. But the background is "<u>all that</u>," a great many things functioning now here, <u>in one event</u>, in understanding (or in the author's producing) this page or this remark. The explicit cognitions from different pages have become implicit. When they become implicit they join the body's implicit functioning which is always already a great implicit intricacy.

I argue that our background functions "precisely." I mean that there are a great many details, each of which is functioning in its own way. We do not mean that the background is only "vague." It can seem vague because we don't see what it contains bit by bit. But what it does is not vague. What it does involves the precise function of each of many details. Just as when we drive without attention, each detail of knowing how to drive functions precisely (if we don't crash), so it is always with the background. We don't see the details separately (which is why it seems vague), but the details have their precise effects. If just one detail fails, I might crash. If I lack one detail, I might not understand what I am reading or hearing.

I also argue that what functions implicitly is "<u>more precise</u>." I mean that when explicit cognitions have become implicit, how each functions takes account of the other details and of everything in the body's implicit functioning. For example, when one first learns to drive one has to think separately about many moves. Only when the explicit moves become implicit do they have the precise effect which is their purpose. In a sport our performance can be improved by expert advice, for example, to bend the left knee. For a while we have to keep thinking of this, but when it joins the rest of what functions implicitly then our game really gets better. So it

is also in many other activities. In an implicit "all that" the effect of details is *more precise* than one can attain when each functions alone.

If I come late to a film, someone might whisper a summary for me, but this could not protect me from many misunderstandings, since I would lack the function of many details. Similarly, when we miss a detail in science, our prediction may go wrong. Each implicit detail retains its precise function.

In addition to explicit events which have become implicit, there are always also a great many details which have never occurred separately. Body process is an implicit intricacy from which we can separate out endlessly many details which are functioning precisely without ever being separated out. These details <u>interaffect</u> each other without ever occurring singly. That is why actually seeing the first part of the movie cannot be replaced even by a very full report.

Experiencing with the body involves so much which interaffects precisely without occurring singly. Analyzing can make something much more distinct and impactful, but only if we have first experienced it. The analysis cannot replace the precise detail in the bodily experience.

The background has been considered a fuzzy merger because we are accustomed to think of order only as separately occurring units. The background seemed to be a merger before units were separated out. But it is rather an order of a different kind. Yes, the background seems indeed vague when we first find it, but I will show how we can enter it so that it opens and we can examine the precision directly.

It is true that we don't <u>attend</u> to each object, but consciousness is vastly wider than attention. Yes, when we look right at an object, the background seems like peripheral vision because we don't see what is around sharply, but that functions precisely nevertheless, or we would stumble when we walk. The whole body functions implicitly in any perception. That includes the surrounding objects and much more.

In the currently available terms we cannot think how the unseparated details of an "all that" can each function precisely. Interaffecting keeps the details "separate" in a way that is more intricate than our usual separate or merged. So we have to stop saying that this background is "unconscious," "vague," "holistic," "peripheral."

How else might we say it? We will need new phrases. Words are defined by phrases. For example I say: The background is *implicit in* the figure. The functioning background is implicit in our present understanding. What is implicit functions in all explicit meanings.

The word "implicit" also has some strands of meaning which we don't mean. All words do. (The "implicit" does not mean hidden, folded under.) Only new phrases made directly from what we mean can retrieve words from what we don't mean.

Or, I phrase it this way: "What we explicitly say is produced and understood <u>in</u> the implicit background (in the "all that"). Note the odd pattern: "<u>in" goes both ways here</u>. The implicit is in the figure, and the figure is made and grasped in the implicit. This two-way "in" is a more intricate relation which we will further examine. It is not the usual kind of preposition. In the space before us things are either in or out, either under or over, either behind or in front, either separate or merged, either two or one. But implicit and explicit are "in each other" in a more intricate kind of "space" which we will examine in Section II.

We can always trace *implicit strands of meaning* in what we are saying and in what we want to mean, as I just did with several strands of what "background" means. Evidently we have

some access to the implicit. I will discuss several kinds of access next.

We can set out new concepts, some of which don't fit the usual model (like an "in" that goes both ways). We can make concepts about the implicit directly from how it functions now in our ongoing speaking and thinking about it (or about anything else). We keep these concepts apart from the unit-defined concepts, although the new kind can also function logically.

Let me set out six concepts we have just made above, to give the "implicit" an initial characterization:

Six characteristics of implicit functioning:

- 1 <u>No space or time position of its own.</u> The implicit is always <u>in</u> the occurring event. Implying has no separate space or time position.
- 2 <u>Environmental interaction</u>. The implicit is an environmental occurring and implies a next environmental occurring.
- 3 Many in one: The implicit "all that" functions <u>in</u> one occurring.
- 4 <u>Separate cognitions become implicit</u>. They continue in the body's implicit functioning from then on.
- 5 <u>Details perform their function precisely.</u> An implicit multiplicity is not merged. The implicit has another kind of order. This order is accessible and we will make it visible.
- 6 <u>Interaffecting.</u> A great many details affect each other precisely without ever occurring as separate units.

<u>I-2</u>) Accessing the implicit: We can always easily say a lot from the implicit:

First I will discuss an easy way of access, then a more difficult way.

You can see how the implicit functions in anything you think or say. You can always say a ton of things about what you are saying and why you are saying it. That comes easily, if you are asked (or ask yourself) to say some of what is involved. When you answer, you speak from what is implicit.

You might be asked: Can you say more? Why are you saying that? Why do you think this or that part of it? What are you really trying to get us to see? (to understand? to do?) Who agrees with this? How does it affect X or Y or Z? (an endless number of other issues). You may or may not have good answers, but each time you can *easily* say something from what functioned implicitly for you.

Your response was not formed until the question was asked. Thinking and speaking always involve development. When you tell more and more, you can no longer distinguish just what was implicit from what has developed further. *There is no such line*. Speaking and thinking involve "*carrying forward*" (my concept for this kind of change, no line between what changed and what stayed the same) Carrying forward expands the thing in the telling, but doesn't change it into a different thing. So, in some sense the further developments "were" all implicit in what one said at first.¹

I call this the "easy saying." I distinguish it from another, more difficult way of access which I will discuss next.

What the word "meaning" means is famously controversial. The words alone are not the meaning, nor is the meaning the implicit without words. We can say what "meaning" means if we keep both words <u>and</u> the implicit. We will further examine this "and." We can say that "meaning" consists of the few words we say <u>and</u> the gigantic "all that" which functions <u>implicitly in</u> what we say and mean. But can we never in any respect have the implicit apart from the particular sentences?

A further distinction is needed: Since the endless and easy further saying is a developing carrying forward, therefore we see that not all of what comes <u>was implicit</u> at first. As we say (explicate, carry forward) some of what was implicit, <u>more and more becomes implicit</u>. (See the term "held" in A Process Model VIIAo.)

It follows that there is no finite numbered "everything" that the implicit "was."

Vermersch and Petitmengin () find that people can describe what happened in a few seconds of carrying out a simple instruction. I think they could go on indefinitely if they were asked every conceivable question, rather than only "what was happening?

<u>I-3</u>) A direct referent (DR, also called a "felt sense")

Humans are <u>never without</u> words because the language is implicit in our bodies. Therefore words are implicit in any human experience. The word "preverbal" rightly says only that the implicit can be sensed without <u>a particular string of words</u>. We can sense the implicit "all that" in a bodily way, "kinaesthetically," like we sense our muscles and being in motion.

There are many common instances in which we implicitly have what we want to say without any particular words. Here are some examples:

Example 1:

When we have said something quite well but the other person didn't understand it, <u>we</u> <u>lean back and think how else we might say "it."</u> Thereby we have separated an "it" from the original set of words. But what exactly do we have at such moments? Here we can directly examine this. What do we have when our meaning is no longer only in the words we just used, and not yet in another set?

Since another way to say "it" will soon come, we see that this "it" contains implicit words even before a particular statement has formed. And if we don't accept the one that comes, another will come, and then still another. We can hold out for a statement that seems to us to say "it."

The implicit "it" consists of a lifetime of learnings but <u>it implies just this</u>. We see that the precision of the implying is <u>stubborn</u>. The "all that" implies just this stubborn next step. It can makes us reject many restatements that suggest themselves. The rejection shows the implicit precision. We reject the restatement because what is implied is <u>more precise</u> than the statement.

Different phrasings don't leave "it" unchanged, but <u>they do not change it into something</u> <u>else</u> ("carrying forward"). So we see that it is not determined only by the statements, although each rephrasing develops it further and also loses some implications.

We see that we can refer directly to an implicit "it" that can come without a particular string of words.

Example 2:

There are other occasions when we refer directly to what we mean apart from a string of words. For example, we may forget what we were about to say. We didn't have words prepared; we just knew we were ready to speak. Now we have a residual sense of it left, but it is <u>closed</u> so that we cannot enter into what it "was." If we refer to this <u>left-over bodily quality</u> (a nameless quality, "that, there . . .") and <u>spend a little time there</u>, it may suddenly open so that what we wanted to say floods back – <u>still not in words</u>, but now open ("nascent") and ready to be spoken from. We can lose and regain this readiness to speak. <u>But what exactly is a readiness?</u>

If we have lost the readiness, we refer to the left over bodily quality which is at first still closed. Pausing and spending a little time with this quality (a closed direct referent) may let it develop into one that is open and ready to speak from. When it does ("Oh, I've got it back!"), it is still without words until they *come*.

We can follow the same procedure also when we want a new step at any juncture of thought. Although not something we already had and lost, the bodily quality can come and then open into a readiness, a wordless "Oh, I know. . ." which then leads to new phrases.

We can let one next-implying come. This may at first feel like standing in front of a gray surface, nothing distinct. But we can attend to the bodily quality, as in the example of getting back what we wanted to say. We can ask: "Is this heavy, jumpy, or neither?" Then we can wait or return to it again and again. Soon we are not sitting with a blank, rather with a bodily "this." Then we can welcome whatever comes, even something small or odd. It will soon lead further.

Many insufficient statements may suggest themselves along the way. Although they get something right, we reject them because they are not precise enough. But how can we know this when we don't yet know what more is implied? The next section will explain how it is possible. Here we only see the fact that the implicit can be more precise.

One might be tempted to infer an "it" theoretically, as if an "it" were always there. When "it" comes and opens, we feel, "Ah, yes, this <u>is</u> what it '<u>was</u>'!" But actually it is more. There was no "it" unless it came. Its coming is a further development, a carrying forward. That is why further steps can come from it, which could not come just in the easy saying.

Only when we lose the readiness and must "get <u>it</u> back," then we focus on the bodily quality until the readiness returns, and then words come.

The bodily quality isn't usually there as such either. It comes in response to our referring. We have to refer to it while it isn't there yet. This is odd but one learns how to do it. At first it is a little <u>fitful</u>; it may come or not, and it has various degrees of distinctness at various times.

The examples show that we <u>can</u> refer to the bodily quality of the "all that," and then to the direct referent that opens without any one set of words. But the examples also show that we usually speak from <u>just the readiness</u> to say something, <u>not</u> from a direct referent.

Examining this readiness will lead us much further.

<u>I-4</u> Readiness to speak; implying-occurring:

But what is a readiness to speak? And how do the words come to us? I open my mouth — and they come. Has no one asked these questions?

Language is implicit in the human body but not as in a dictionary, where the words themselves are there. The language is implicit <u>as the ability to form sentences</u> from any "this," any aspect of experience we set apart by referring. When any aspect however large or tiny is made a "this," the implicit language can form sentences to speak just from it. The particular words only <u>come</u> as we speak.

Since there are no established concepts about "<u>implicit language</u>," "<u>readiness to speak</u>, and <u>how words come</u>," let us establish new concepts. Let us allow these three phrases to be concepts. But what do they mean? Well, <u>first off they mean what they do here:</u> how they themselves are speaking from implicit language, from the readiness to speak, and from the coming of the words. Of course we will say more and more with and from them; we will let them generate more specific phrases and concepts in which they can say more about themselves.

With these three concepts we can go on to <u>redefine "human body"</u> as always including implicit language, readiness, and the coming of words. This expands the meaning to include what the word "body" has been doing in my discussion so far. The human body is not only the externally observable structure, but <u>also the body sensed from inside</u>. The reason why what we sense from inside can form fresh phrases is that language is implicit in the body.

The words come already appropriate to the situation. They don't come singly as if we had to put them together. Rather, they <u>come</u> arranged in grammatical sentences to say this to this person in this situation. The words have arranged themselves implicitly; by the time they come they are all arranged. So we see that the body implicitly "knows" (has, is, implies) the situation and action (including speaking) to meet it.

But what is a "situation?" A situation is not just the external facts, not that there is a river there, but that I need to get across, or that it protects me from pursuers, or that I could support myself by setting up a ferry here. The demand to meet the situation is implicit and not yet the behaviors or sentences. To "meet" it means acting to change it, but not into a different situation, rather into how this situation demands (implies). Only if we break up the situation have we changed it into a different one. An action that meets it develops and reveals what the situation really "was." Here again we need our concept "carrying forward," a change but not into something else. We could derive "carrying forward" from this familiar character of situations.

The readiness implies what we <u>will</u> do or say. So it is a kind of future that is here now. We need a concept for that kind of future. Let us allow my phrase "the body implies" to conceptualize how what has not yet formed and occurred is here now.²

The readiness and the coming of words are one kind of "implying" and "occurring" (according to our broader model). The readiness to speak is just one instance of the body's implying. The <u>bodily</u> quality of a situation opens into small steps and then a whole field of cognitions. So we can directly observe that <u>cognition is a bodily process</u>. Cognition is a special kind of behavior, and behavior is a special kind of <u>bodily process</u> (as I will show further, below). They are not three different things. There are not lines between them.

² Currently spoken of as "anticipation," see Gallagher 2006. It is not recognized as the implying which is always part of body process and behavior formation. A Process Model IVB has the more intricate model of time that is implicit here.

<u>I-5</u> Occurring into implying:

We can conceptualize all organismic bodily process (including the lowest) as implying and occurring. The readiness for speech and the coming of words is just one instance of the body's implying and occurring. What occurs from the organism enacts something like what the organism implied. I say "something like" because the implying (like the readiness to speak) is not yet any particular words, behavior, or tissue process. The implying is "all that," many past events, but it implies one next occurring. *The occurring is not formed until it comes in the environment.* Therefore implying is never the same as what the occurring enacts.

We can define the word "enacting" from how it just worked: "Enacting" means the environmental occurring of – something like — what the body implied.

The implying is *not indeterminate*, rather more determined than something that has just one form. This is why it can be difficult to get sentences that carry the implying forward.

Although what is implied has not formed a set of words, behaviors, or bodily events, the implying can be more precise than anything that has ever happened. We see that it is so, but how can this new precision be explained? It is because the body's implicit functioning is always already more than what cognition will ever carry forward. A second reason is that cognitions and events join the vast "all that" in a fresh implying. And, implying is always fresh, and so is occurring which depends both on the implying and on the momentarily present environment. That is why the implying can be so immensely stubborn, leading us to reject many possible statements even though it has never as yet been said.

The implying implies one next occurring which will carry the implying forward. If that happens, the implying is carried forward so that it implies a further occurring which, if it happens, will carry the implying forward to imply a further occurring. *Implying-occurring is a process*. We have derived a model of process.

According to our model, process is never just occurring-occurring, never only formed events. Occurring carries the implying forward so that it <u>implies a further</u> occurring which carries the implying forward so that it implies a still further occurring.

<u>I-6</u> <u>Implying is body-environment interaction</u>:

Implying and occurring are enacted in the environment. The implying implies an environmental occurrence and the occurring is an environmental event. All implicit functioning is body-environment interaction.

Implying exists only within occurring, not in a space and time of its own. The implying happens in the environment. The body is body-environment interaction.

When the body senses itself from inside itself, it senses itself as the environmental interaction it is. But the readiness (the implying) is usually enacted without being sensed as implying. But we <u>can</u> sense the implying, the body's readiness to speak, to act, to eat or breathe. When we do sense "it" as such, that is a newly intervening event.

In biology the very material of the body is understood to be engaged in environmental exchange. But biology considers only an externally observed body. And, biology constructs the body out of existing units that we have already defined. I say rather that the body <u>is</u> environmental interaction <u>first</u>, before it forms also as a structure, and before units are divided and defined. (See *A Process Model*.)

The body sensed from inside the body is environmental interaction. When we sense the readiness as such, that is not only "inner," not "subjective." It is body process, the ongoing body-environment interaction. This fact has not been well understood in philosophy.

11-7 We can move on from where philosophy is currently stopped:

In my philosophy the body is "interaction first," and only secondarily a separate structure. This applies also to the body as sensed from inside the body. What we sense is always environmental interaction. Nothing is *only* "subjective."

I share the denial of anything purely subjective with Wittgenstein and Heidegger. I agree with Heidegger that all experiencing is being in the world. But after 1926 Heidegger thought that only a variety of highly abstract conceptual models gives meaning to events. For him practice and experience are determined only by language and conceptual models of "Being."

Wittgenstein is misinterpreted to have denied inner experiencing altogether, as if we didn't have any all day. He did not say that.³ He said (as I do) that "inner" experiencing is always already involved in "forms of life," i.e., consists of interactions in situations. When you sit down on a chair you "expect" it to hold you. He argued that such an "expectation" is not a separate "inner" event, apart from sitting down in the chair. The expectation is only that you would be surprised if the chair collapsed under you. (As I would say this, an "expectation" of holding you is implicit whenever you sit down on something, but I agree with him that (what I call) the "implicit" is always an environmental interaction, never <u>only</u> "internal" or "subjective."

After Heidegger and Wittgenstein philosophers have assumed that only language gives meaning to sensing the body "from inside." The common experiencing we have all day is philosophically ignored because they think of it as merely internal and indeterminate, made interactional only by language.

There is a big difference between my view and that of the current philosophers. They say that the body <u>as sensed from inside</u> is meaningful and interactional <u>only</u> through language (which includes concepts, culture, and history). If we find a bodily sense meaningful, they think this can only be what language and culture have trained into our bodies. For example, Foucault ridicules the people he met in California who think that their experiencing can be a source of thoughts and meanings. Philosophers think they know that meaning is <u>determined only by</u> language.

Currently emotion (affect) is being discussed, but the implicit is not emotion. The implicit is much wider and very different. The bodily sense which leads to a direct referent is usually slight, opens into a vast "all that" and a whole field that is differentiable.

The implicit as environmental interaction is currently not widely known. If at all, it is known as the "not" (not determined, not formed, not precise, not logical, not capable of being stated, not clear), the discouraging "contextualism." The implicit which we can easily speak from, and the direct referent which can come, are still largely unknown.

Bodily sensing is supposed to consist only of the five kinds of sense-data, intakes of external objects or parts of the body such as muscles and limbs, considered as if they were external objects. The word "body" means only the *externally* observed body in an "external" space that is split off from "internal interpretations." But as we have seen, the "internally" sensed implicit is environmental interaction too. It is part of the body's implying.

In the body's implying there is no division between hunger, the next action, and the next saying. The body's implying is not divided into separate compartments. The implying is an interaction in the situation. The breath is not separate from the whole situation and what we are ready to do and say.

³ See my article "What happens when Wittgenstein asks 'What happens when...'" See also Cavell, Schneider

It is true that human bodies are <u>never without</u> implicit language. But <u>"never without"</u> language has been confused with <u>"determined only by"</u> language. Language profoundly changes and develops the human animal all the way through, but the body's implying is and remains more than what language determines.

To view bodily experiencing in this new way changes the frame of theoretical thinking. It leads to new concepts of the body, behavior, perception, language, and nearly everything else. The role of experiencing in concept formation becomes understandable, greatly expanded and systematically used.

When <u>never without</u> language is confused with <u>determined only by</u> language, then one misses how experience functions in the language we speak. How we experience speaking and thinking is not studied, and not engaged to study itself, its own forming and coming.

In 1993 I wrote that "words can say how they work." Now we can examine how a word speaks from what it is "doing" — how it "works" — in this use in this situation right here.

Human experience is <u>never without</u> a huge cluster of implicit words and concepts, and never without their history. But most philosophers currently take this "never without" to indicate that <u>only</u> language, concepts, and history <u>determine</u> human experience. Therefore it seems to them that bodily feelings cannot be meaningful in any way before what language says.

The human body is never without language but I argue that "never without" <u>need not</u> mean "determined only by." And the reason it <u>does not</u> mean "determined only by" language is <u>because</u> the bodily implying is environmental situational interaction, can be sensed from inside, and is always much more than we can say.

But spoken and conceptual advances also add and develop the bodily implying. When they become implicit they have *greater* effects than they had just as discrete occurrences.

There is always a big difference between the <u>implicit kind of precision</u> and the <u>logical kind of precision</u>. Neither can replace the other. Logical concepts expand the implicit, which can lead to new concepts, which then further expand the implicit. They expand each other reciprocally.

⁴ 1993/1995

I-8) The apparent "breaks" in the logic of science are actually its reciprocity with the implicit:

We will understand and use our unit model science very differently when we consider it within the reciprocal movement between the logical and the implicit precision. To so consider science also solves many philosophical puzzles. Let me discuss one of them which will let us further examine the reciprocity.

There is a well-known discontinuity between this year's scientific concepts and those of a few years ago. Many concepts have disappeared, each replaced by six or more new ones. Kuhn pointed this out long ago. More recently Fodor () examined the problem extensively and saw that there is really no answer. That is to say, there is no answer in the current terms (what I call "unit model" terms), which assume that nature is given in discrete entities with logical relations between them. No logical progression can be constructed from last year's to this year's concepts. The new concepts are more numerous and just different.

This discontinuity in science looks like a break. What lies in the "break" is concept *formation*. Logic happens between already-formed concepts. Science cannot account for itself. It does not proceed only logically. The process of forming new concepts is not logic. Neither is it really a break.

We have seen that the previous concepts continue implicitly, like the previous pages of a book we are reading. Implicitly they have more effects than as concepts alone. They interaffect with the whole of the bodily implying and with each other. That is why more precise and numerous new concepts can come from the implicit.

We must keep our <u>conceptual systems</u> separate from <u>the implicit</u>, as I said at the start, but in the wider system we are developing we can examine how the logic and the implicit precisions relate and reciprocally expand each other.

Crease (*The Play of Nature* and his *Folio* article) has pointed out that scientists do much more in the lab than test predictions from theory. What they mostly do is rather a kind of "play." They try all sorts of things, and then hold on to anything that happens regularly in response. From something regular ("If we do X we get Y") they define a new entity.

When the play in the lab produces new entities, then theory enters. The scientist asks: How come it responds like that? And no theory can account for something without relating to our many other theories where the same terms are used. A huge implicit "all that" is involved whenever a theorist thinks. In devising or revising a theory, the implicit functions indispensably, as I have shown elsewhere at length.⁵ Theory, operations, and the implicit are three inherently linked dimensions of science.

One kind of doing is testing predictions. Why can operational testing (for example, turning on a newly built machine) disconfirm our logical predictions? It is, as I have long argued, because *empirical testing is direct environmental interaction*. *Operations don't happen within our conceptual system; they happen directly in the actual environment*.

We don't test concepts; we test operations. Because operations are fresh environmental interaction, therefore its results can differ from what we logically predicted. That is also why they always produce vastly more data, not just what confirms or disconfirms our predictions.

We see that the nature science presents is not just an "is" that lies there. *Nature is also its*

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⁵ Leidlmair ed., _____

<u>response to what we do</u>, as Francis Bacon said long ago. (Nature also includes its response to what animals and plants \underline{do} .) Nature is a responsive order. Our doings lead to new entities, new concepts, and new machines which enable us to do many vital things and "play" in further ways.

We live and act directly in the environment; we are not surrounded by our conceptual systems. All conceptual systems we know are always implicit for us but they never displace fresh environmental interaction and experience. <u>Bodily implying (including what of it we sense from inside) consists of direct interaction with the environment.</u> Behavior and cognition are special kinds of body process.

The logical kind of precision can also arrive at new results. The Artificial Intelligence people were not wrong to point out that logical inference and computers can lead us to results and new environmental interactions which our implicit understanding could never have reached. But *then* we look around there and do something there. The new results become implicit and interaffect everything else in the bodily "all that," which then enables us to arrive at new concepts and doings which the computer could never have reached.

The reciprocity between logical and implicit precision has obtained throughout history, but it has not been understood as such.⁷

Our conceptual systems (including this new one) are never all of whatever we are studying. The process of thinking and doing is always a body-environment interaction which involves the process as well as the content of what we think. Nature (the environment, whatever we study) is an implicit intricacy, never equivalent to explicit concepts, never just objects of a knowledge, never just an "-ology." This is not a drawback, not a terrible problem (as it seems from the unit model alone), rather the guarantee that more can happen.

Conceptual systems can never be what explains everything. Conceptual systems (concepts with their own logical form and power) have to be understood as explications, products of concept *formation*, a wider process of implying and occurring that leads to further implying.

We can use the reciprocity systematically in concept formation. It has been a mistake to assume that we cannot think further about the implicit. We can speak from how the implicit functions, which leads to a new model, concepts of a new kind, in terms of which we can explain how the implicit functions, and generate new logical concepts as well.

We saw — but have not yet explained — how the "all that" can imply one next move. How does the vast amount of implicit experience imply the single next occurring and how does it come? We have also not yet explained how the new occurring "takes account" of the previous experiences in its very coming. The next section will explain the coming and the taking account.

See my "The responsive order: A new empiricism." Man and World, 30 (3), 383-411. (1997).

Historically dialectic is a systematic mode of thought that does not reduce to existing concepts. And it did assert a cumulative wisdom (Plato) or "aufheben" (Hegel) which I have explicated as "iy9." But dialectic attributes the coming of new concepts to the contradictions between the old concepts, thus making the role of the implicit invisible. But a contradiction just of concepts cancels out to nothing. Plato's Socrates refused to discuss anything without an actual person as interlocutor, which recognized an unavowed role of the implicit and our process. Hegel eliminates individual persons by subsuming them into the movement of concepts. Everything is due to the concepts. But the dialectic moves only because the (unavowed) role of the implicit exceeds the existing concepts. See my discussion of Plato's Meno in my ________.

II. COMING AND FORMING IN THE COMING

II-1 Two questions: the coming and the taking account:

It has seldom been asked how the words to say something come to us. I open my mouth — and they come. We will find more and more about this coming by speaking from the implying in our actual speaking and thinking. This is what we have been doing. The coming in our actual speaking has rarely been examined very far.⁸

Consider the coming in the special case when we work on a problem. At first nothing comes. (If we are asked about the problem, we can easily say many things, why it matters, how it came about. Many old thoughts are implicit, but if we don't ask about those, nothing comes to advance the problem. *The "nothing comes" is really quite smart.* It involves the implicit "knowing" why each old thought has no chance of providing even a small advance on the problem. What comes can include many unlikely ideas that fail examination immediately, but the old solid answers do not come. You can observe this implicit knowing if someone asks you about any one of the old well-known thoughts. You could say why it won't advance the problem. So you can observe that *each* old thought has functioned quite precisely in the nothing comes. We have already seen this precision of each detail in many examples. Now we want to explain it.

We can feel when a thought has the slightest chance of advancing a problem. It might be a big idea or only a little lead. Whatever comes might fail immediately on examination. But if it came at all, it had some slight chance to move the problem. If we wonder why it came, we can usually trace why it had a chance. So we can observe that the "nothing comes" has <u>taken</u> <u>account</u> of all that in allowing the thought to come.

We have two questions: (1) Why does the "taking account" not require going through the previous moves singly, one by one? (2) How does taking account happen in the very coming of the next move? Before I explain, consider an example.

An example: chess masters.

Dreyfus () has pointed out that <u>chess masters</u> make new moves <u>without deliberating</u>. They don't spend time considering each of the many possible moves. Only the new move comes to them. We are explaining this. Masters have spent years studying books of games; they know many possible moves at any point. Now they don't have to run through all those old moves (as the computer does). Those moves don't come to mind to be considered. Nothing comes until a new move comes. ¹⁰

Now that we see how to do this, we might expect phenomenology to have done this, but it did not. I say more about that below and in the last section.

Perhaps the new concepts do not take account of <u>all</u> the previous (as Kuhn pointed out). Something that was ignored might later be resurrected and gone on from. But we would certainly not adopt new concepts as better and more precise <u>if they required losing much of our previous technology</u> and if we could no longer do and explain what the earlier concepts enable us to do and explain. Revising a theory would be easy if we could simply change it to accord with new findings. It is hard and can long remain impossible to do, because the theory has to be consistent with a great many other theories in which the same concepts appear.

See my discussion of how scientific theories are revised, in my paper in the Leidlmair volume, Springer 2009.

Of course the chess rules form a conceptually limited scheme which is not changed by a new move. It is not yet

The master doesn't deliberate when playing with ordinary players. When masters play each other, they want every minute of the allotted time <u>to examine the move they are about to make</u>. Several new moves may occur to them, but certainly not the many old moves.

A new move cannot be examined in terms of old moves. The consequences of each old move fourteen moves ahead are accounted for, and also their consequences in relation to each other. The old possible moves result in a problematic situation in which the new move is already more promising.

We can see that all this has implicitly happened, if we ask the master about any one old move, "Why didn't you do well-known move X?" The master would be ready to reply by comparing its possible consequences fourteen moves down with those of the new move.

<u>To compare old and new consequences would generate a new logical system which could</u> <u>not have been created before the new move came.</u> The new consequences are new units, implicit in the new move but not yet generated separately. To examine the new move, the master generates the possible consequences one by one. This might reveal some possibilities that had not been taken account of and need to be pursued or avoided. Here we can see the inherent reciprocity between logical units and how the implicit functions. The new coming is more than the old moves, but generating the new possibilities unit by unit makes still more possible.

All this applies not only in chess, of course. A new thought can come in any situation and when it does then we examine what follows from it. We examine it in terms of the new units which are generated from it. We do that also with any new phrase or course of action. We could of course examine why the new one has more promise than any one old thought, but there is no need to do that. We rather trace the consequences of the new thought. Although we trace them one by one, we carry all the different consequences with us; implicitly we think "all that." Then, if need be, we also generate a logical system with these new units which could not have been generated before the new move came.

The implicit kind of precision of the coming is not logical deducible in advance because the units are new. But the implicit kind is certainly not <u>not</u>-logical, as we see, since logical systems can be generated from it. <u>Not deductive but not not-logical is an interesting kind of order, isn't it?</u> It is a more intricate pattern than the usual kind of order that consists just of units. The coming takes account of the previous units to generate something that does not follow just from them. New units are not there either, but can be generated from what came. Then with the new units we can logically explain what came.

The consequences of the new coming are <u>new units</u>, a changed field of possibilities. But what is a "field" of possibilities and consequences together? Let us examine what "field of possibilities" means here, and how it changes in the coming of a new thought.

II-2) The space of behavior possibilities:

To see the implicit kind of precision, let us ask: What is this implicit "field of possibilities?" How is it ordered and how is one occurring – one coming – a change in the whole field?

Many behaviors are always possible for us. At any moment there are always many alternatives. Let us examine how these are interrelated.

If we consider just the things before us, they appear to be <u>side by side</u> in the familiar kind of "space." This space seems to exist with or without objects, but is empty without them. This is the familiar "space" in which objects move, i.e., change their locations.

But each object comes with many possible behaviors. (Gibson called them affordances.) Behaviors are not mere motions, not mere changes in location. We perceive objects with the ways we could behave with them, for example hold them, or push them, eat them, sit on them.

The possible behaviors do <u>not</u> appear side by side like their objects. Let me expand this key point: Behavior possibilities are not side-by-side. An object is perceived <u>in</u> a cluster of possible behaviors. Only the objects are spread out side by side in location space; the behavior possibilities (what we <u>can</u> now do) are organized in a different way. The behavior possibilities constitute an implicit space that is quite different from the space that consists just of objects. How are they organized?

<u>A behavior changes what other behaviors can be done and how they can be done.</u> If we kick the ball we can no longer pick it up and throw it. If we kick someone, we can no longer fondle the person, or the fondling will now be a comforting. If we boiled the eggs, we can't then fry them. <u>Each behavior is a change of the cluster of implicit "cans."</u> If we do <u>this</u> we can no longer do <u>that</u>, or not in the same way as before. On the other hand, after each behavior we can do some that we couldn't do before.

A behavior is not only itself, not only what occurs. A behavior <u>is</u> a change of the implicit cluster of other behavior possibilities. <u>A behavior alters the field in which it occurs</u>. The whole cluster is changed in any possible behavior. The behavior occurs in the changed cluster.

Each of the other behaviors is also such a cluster-change when it occurs. Each of the many possible behaviors is a cluster that includes the one behavior which just occurred. They are all implicit in what each is. If the behavior that occurred is new, each of the possible behaviors now has the new one in its cluster.

Now we see more clearly how the many different consequences are taken account of in relation to each other (which we discussed in the chess move). Each behavior possibility interrelates the consequences of the possible behaviors in its cluster. Each is a version of <u>all of them</u>, and the one behavior that actually comes re-forms the cluster of all these versions of "all of them."

<u>II-3</u>) We perceive objects *in* the implicit space of behavior possibilities:

Objects are behavior possibilities. Many possible behaviors come with any object. The objects exist not just in locations but <u>in</u> the space of behavior possibilities. <u>The behavior space is</u> the space in which we act and perceive. 11

Perception does not consist only of momentary intakes from the sense organs. We <u>perceive</u> objects <u>in</u> the wider space of behavior possibilities. The momentary sensations <u>occur</u> <u>into</u> the wider behavior space.

The organ intakes are separate colors, sounds, and smells, etc. The separate intakes <u>come</u> <u>into the behavior space</u>. We perceive behavioral objects, not just colors and sounds.

The dog doesn't see <u>colors as colors</u>. The dog sees me coming, sees that I'm eating food, and would like some. Humans do also perceive colors and sounds as such, but like the dog, we perceive the objects. We perceive not only colors and smells but also the food we could eat. We take the food out of the oven and *see* that it is still not cooked enough.

In the space of our behavior possibilities we also perceive changed possibilities. We perceive *that* someone could walk in because the door was left open.

When what we could do with an object has just changed, we perceive not only the object but the fact that what we could do has changed. We *perceive that we can't* go for a walk now because it has begun to rain. We perceive that an object with which we could have done behavior X has just changed so that now we cannot do X, but now perhaps we can do Y.

We <u>perceive that</u> the steaming water is too hot to drink, i.e. we perceive it <u>in</u> the space of behavior possibilities. We perceive <u>that</u> the dirty chair needs brushing off before we sit down in it.

Even at the moment we have no organ intakes from the things at our side, we <u>perceive</u> <u>that</u> they are still at our side. We perceive the objects in front of us <u>in</u> the space of the behavior possibilities which includes that we could turn to the things at our side.

Perceiving things in behavior space includes sensing the space and objects behind us (as Merleau-Ponty said, and I explain.) We perceive and walk in a space in which we could back up or turn around and go. We would be shocked if we suddenly perceived nothingness behind us, a sheer abyss into which we would disappear if we backed up.

Because the body implies objects in the space of behavior possibilities, therefore we can do skillful actions with the body without first having a separate perception (a "just-perception," I call it) to see how we can. Without first just perceiving how I will do it, my hands rotate the empty pot so I can grab the handles.

For example, I am surprised to find my thumb sticking out to keep the stack of papers next to me on my easy chair from moving with me as I get up. Similarly, Damasio observed that before he perceived it his body had switched his cup of coffee from one hand to the other so he could grab the bannister. But Damasio attributes it all just to "evolution" and leaves it dark. We are explaining how the body does it, and why it can.

My thumb move comes because the space in which I perceive and act changes as I get up. That perceived space includes the objects in front, behind and next to me, and how they would change if I got up. In the past the papers next to me have slid forward and fallen on the floor. "All that" functions implicitly in the coming of my next behavior.

Current theory assumes "sensory-motor coupling." But I argue that there won't be clear findings until behavior, rather than just motion, is assumed to be coupled to sensing. See Noe () and Gallagher (2006).

For my thumb to come out, my body did not first need just to perceive how the papers could be kept from sliding. *The perception is part of behavior formation*. I call this kind of perception "in-behav perception." It is not a separate event of just perception.

If "perception" is defined only as the present organ intakes, then all the above has to be considered "interpretation," something "only internal," therefore "subjective." But behavior possibilities are not just subjective since we can do them. The space of behavior possibilities_ and its change is environmental interaction.

Humans do <u>also</u> perceive separate colors and sounds as such, but not as objects. In separation the five kinds of sense data are not objects. One cannot behave with just sound or just color. An intake in a single sense is never perceived alone, rather it <u>comes into</u> the space of possible behaviors with objects, and modifies that space. Behavior objects are not constructed from prior separate sense data alone. 12

The body implies objects because it implies behavior. In behavior the objects are implied in all five sense modalities. The body implies five-sense objects even when only one sense is coming from an organ just now. A behavior that is now forming is modified by a single organ intake. If there is an intake from a second sense, it would also modify the ongoing formation, so it would join the first intake. This explains Gallagher's "intermodal" perception. He has established the concept of "intermodal perception," but how the connections occur has remained a puzzle because of the mistaken assumption that perception consists just of separate intakes from the different single organs. It seemed that something had to connect prior separated senses, but no such neurological connector has been found. (Newborns connect the five modalities long before additional neurological connections develop.)

The analysis in terms of organ-intakes is valid and highly useful, but perception cannot be conceptualized only as organ intakes. We perceive in the formation of behavior.

Aesthetics will greatly profit, if it is understood that perception is part of behavior formation and body process, and only as part of that is it also the response to colors and sounds as such.

<u>II-4)</u> <u>Immediate formation is forming-into</u>:

Now we can explain the taking account which we questioned on a previous page (p. 15). Since the forming of a behavior is also the re-forming of the behavior possibilities, therefore the occurring behavior <u>forms-into</u> the implicit cluster of behavior possibilities. <u>Therefore a behavior cannot form without (what we called) "taking account" of the previous moves</u> (the cluster of other behaviors), since its forming and coming <u>is</u> their re-forming.

This is the reason why the taking account happens in the very coming. The coming \underline{is} the taking account of the other possibilities, because it is also their re-formation. So the behavior cannot form except by forming into them.

This is why an infant lamb stops at the edge of the cliff (in the experiment with a glass plate over the cliff), even though it has never seen anything like that before. It doesn't "know," but a walking sequence cannot form with the cliff feedback. It may seem that the lamb could just "walk" forward and fall off the cliff, but the body implies the feedback from the ground in the walking. Walking cannot form with a cliff. To form, the environmental effect of each bit of the sequence has to be such that a next bit <u>can</u> form. This kind of perception has to happen in the very formation of the behavior.

Even with all the human developments, our behavior can still happen only if environmental feedback continues the sequence. Our walking now can form only with the present environmental feedback from the ground and the whole space. Or, for example, to go on hammering, the nail must be going in or at least continue to stick up straight. If the nail got bent over, we stop hammering. The behavior continues only if the in-behav perception changes the implying into the next implying in the sequence. We have hammered many times before, but this hammering is again a fresh formation. Each time requires that the nail not bend. The whole behavior sequence is implied but to occur again it must form freshly each time.

<u>Now we have now answered the two questions we had.</u> It was a puzzle why the "taking account" doesn't require going through the previous moves singly, one by one, and how taking account happens in the very coming of the next move. We have seen that a behavior forms-into the implicit cluster of the others so that it cannot form if it is not also a way to reform them. So we see why the taking account happens in the very coming.

The new model:

Implying happens only in an environmental occurring. Implying has no separate space and time position of its own. Occurring changes implying from this implying to the next. The implying in this occurring implies the next occurring.

Linear time is not prior. The linear unit model of successive self-identical times is generated from the more intricate model of time. (See *A Process Model* IVB.) Linear time is only occurring occurring which is derived from occurring implying occurring implying.

Because the next organismic events <u>can only form into</u> the previous, therefore implying implies <u>into</u> the environment, and the environment occurs <u>into</u> the implying. Here we explain the two-directional "in." The past environments are in the implying, but the occurring is the momentarily present environment <u>occurring into</u> the organism's implying.

This is <u>because</u> the implying exists only in the environment. The organism is environmental interaction, not a separate structure and then separately also in interaction with the environment.

III. SYSTEMATIC USE OF THE "BACKGROUND"

III-1 Logic consists of external relations:

We have made concepts for behavior possibilities that are implicit in each other (ieo), and for new forming and coming which changes the behavior possibilities in the coming. These new concepts seem odd because they cannot be broken into units that can be understood each separately. ¹³

In logical relations the units are external to each other. Logic relates separable units. They are <u>external</u> to each other insofar as each is supposed to be fully understandable (fully determined) by itself. Logical units are what I call "<u>self-identical</u>." Each unit has its own spacetime location and relates to units that have their space and time locations. The units relate in a grid of space and time. (Now with Quantum the space-time grid can vary; it is no longer just Newton's.)¹⁴

My talk of "external relations" can be confusing because logic is sometimes spoken of as internal relations. A redundant analytic judgment such as "Bachelors are unmarried" follows simply from the fact that "bachelor" is defined as "unmarried." So the notion "unmarried" is already "in" the notion of bachelor.

When we divide something into parts and re-construct it out of those parts, we say that we have <u>explained</u> the thing. Many different things can be divided and re-composed of the same units. When we can convert them into each other by re-arranging the units, then the two things are <u>logically related</u>. We build the same units into the concept of each. Then the relation between events becomes "logically necessary."

Of course this is different from interaffecting (how the many are related in an implicit "all that"). How units relate and combine is <u>explained</u> by how each unit is understood <u>alone</u>. Units are self-identical, "external" to each other. ¹⁵

When the units seem to define the thing, the implicit drops out of consideration. It seems to be neither in the thing nor in our understanding of the thing. There seems to be neither a space of possible behaviors nor the forming and coming. There seem to be only intakes from the external, the "outside." How does this externality come about?

The explanatory power of the units depends on them having <u>their own</u> definitions. <u>So</u> <u>they seem to hide the "all that"</u> which played a role in how we made them and is always still implicit in the units. Their own definitions seem sufficient to determine them fully (although we

In the philosophical tradition such relations were called "internal relations" but have never been explained. That is why calling them "holistic" today is discouraging, as if one could not make concepts from them and could not think precisely and specifically from them. They were assumed to be what cognitive analysis lays out in units, but this isn't so. Internal relations are implicitly much more than cognitive analysis explicates, and cognitive analysis implicitly generates still more. We are now explaining how internal relations relate to the spread-out external relations. Since this was assumed to be an equation, it has never been explained how internal relations function as a ground of explication.

Unitized entities move in space but remain the same ones. An observer must define this unit here as the "same" one that was earlier over there. (Quantum space and energy are slowly changing this, but still cling to "analyticity" which means the permissible equations have to be reducible to units, even if they have to be "virtual particles.")

⁵ TAE (Thinking at the Edge) generates such logical relations from internal relations so that a TAE theory has both. See Section __ of my 2009 Journal of Consciousness Studies paper and TAE Folio (2004)

will change them in a year or two). Logical relations between units constitute a grid of *their own* interrelations.

Of course we are the ones who do the dividing and experimenting to make and conceptualize these units and relations, but they constitute a grid of their own interrelations, *external* to us. This grid splits their "real" effects in "external" space off from their effects on the body-environment interaction (our bodily-implied behavior in the situation).

The body feels (is, experiences) how the events affect its implying. But now there is a split between supposedly internal and external effects. The real events seem to happen <u>only</u> in the "external" space of the unit grid. Therefore the body-and-situation seems to be only "internal," only subjective. But this is not so. The bodily implying is environmental interaction too, and primarily. The situation is in the body and the body process happens in the situation. (A situation doesn't exist without the person whose situation it is, of course.)

But the gap seems unbridgeable between the external mesh of logical relations and the implicit effect which we feel. The grid of external logical relations covers – and seems to \underline{be} – what exists. Any event is split in two: the effect in the <u>external space before us</u> is split off from the <u>implicit effect</u> which seems to be <u>only</u> a subjective interpretation, something added to "perceptions" that are purely intakes. The perceived object is assumed to be composed of prior separate sense-intakes.

When considered on the grid of logical units, "perception" seems to be only momentary intakes. The body's implying seems subjective. We seem to live in the external space of *flat* conceptualized entities. I call them "flat" when they seem to be without their "all that," lacking internal leads to a next behavior or thought. ¹⁶

Our technology depends on this conceptualized "environment," this grid of interrelated unit relations. We perform wonderful interventions in this external "body" and environment. What appears in the external grid is explained and manipulated, while the implicit relations are left dark, considered the so-called "human world." But we need not limit what we study to the externally observed body and environment. We can also study the effects on the body's implying and how the next behavior comes. We have to keep the two approaches separate because the logical power of the unit-relations depends on splitting the implicit away from self-identical units and relations, as I just explained.

What has been called the "<u>hard problem</u>" is to reconnect consciousness to the self-identical unit concepts which inherently exclude it. But this isn't just hard. The problem is posed in a form in which it is inherently insoluble. What is excluded by the very nature of the unit concepts cannot be added directly to them. Consciousness can certainly be studied, but in terms of a different kind of concept, and by the reciprocity with the implicit which we have been discussing. The unit concepts are inherently self-identical, i.e., without anything implicit and without us. In my main work I offer a well worked out derivation of how consciousness

Although the implicit is still always there, thoughts go "flat" when we take them only as the conceptual generality because the implicit "all that" does not follow from the general concept and cannot be gotten back from it alone. Even one's own new conceptualizations directly from the implicit can go flat when one exchanges them for the concept one just made. Therefore one should (and can) carry what one implicitly senses along with the concept, and think with both.

develops.¹⁷ But we can see right here that consciousness cannot be rendered in the grid of units that split consciousness away. The "problem" comes from assuming that everything must be explained in terms of already-formed (i.e., self-identical) externals, splitting away the function of the implicit.

The gap is not between body and mind, not between meaningless matter and interpretation, not between existence and thought. In the body there is no such separation. The seeming gap is actually the *inherent connection* between what appears before us and the implicit generating of what appears before us.

The tremendous human advances have come with the kind of concepts that bring <u>their</u> <u>own</u> inferences separately <u>from us</u> who obviously generate and think them. These concepts have their own power by working "alone," without us. ("Mathematics would be true even if there were no people," it is always said). Of course we cannot connect the implicit consciousness to these concepts across the gap of their own power, and miss how they are already inherently connected in implicit relations.

This "alone" from us but made and had by us is obvious, no puzzle. It becomes a puzzle only if we first deny that what is implicit exists, or that what exists is an implicit intricacy. Then it seems that what exists is only this "alone" made by us. The space of reality seems to be the mesh of "external" relations that we make.

Kant assumed that what can exist must appear in the space and time grid of logical relations. Nothing unshaped in space or not determined in time can exist; it would be mere flow (and even so it would be in linear time). Everything seems to be <u>our</u> mere representation of something that may or may not exist on the unimaginable other side of an unbridgeable gap. But what exists apart from affecting us is a different question. <u>It seems to be the same question only if we first assume that nothing other than clearly shaped units can exist.</u> Then we need what we think and say to have the same form as what exists, and we can never know whether this is so.

Without the implicit there is only occurring - occurring - occurring, the linear time positions. We can derive linear time from implying - occurring - implying simply by dropping out the implying.

The denial of anything implicit creates a metaphysical gap instead of the inherent implying-<u>occurring connection</u>. If only what appears exists, then what exists is "external," in front of us, <u>other than us</u>, as if alone <u>from us</u>, over-there <u>from here</u>. To "exist" came to mean to appear to us. The very word for things became (and still is) "phenomena." This is the old subject-object puzzle: what exists can only be a known-by.

The metaphysical puzzle comes here only if we *first* assume that what exists must have a self-identical shape in space and time. Then there seems to be nothing but formed forms imposed on — nothing.

People want an implicit to determine which of several relevances, formulations, or terminologies is the right one. Since the implicit doesn't do that directly, they deny an implicit altogether. But to evaluate alternatives one has to re-enter the implicit and discover the intricacy behind the either/or. Then one can arrive at a formulation that goes further.

The implicit does not have the single form or shape that a formulation has. It is always a

¹⁷ See A Process Model VI. Consciousness arises in behavior and occurs in all animals. The human capacity to respond to patterns and to separate sense data as pictures of (the bodily symbolizing) is derived in A Process Model VIIA. Of course a shart paper can give only some hints of it.

great many interaffecting details which imply the next environmental occurring. The implicit is never equal to the occurring, never already the occurring. As we have seen throughout, what occurs is not formed until it comes in the environment. What is now occurring is always *this* implicit intricacy, this way, just so. It may also have this form, this saying, this concept, but many different terminologies, concepts, and relevances can always carry it forward.

Instead of assuming that nothing exists other than self-identical things, let us access the implicit which is always right now functioning, and let new phrases and new concepts come.

<u>III-2</u>) Pitfalls of theory in the unit model:

Analysis in the unit model can mislead us because it assumes that everything is composed *only* of discrete units. So it comes to conclusions without taking implicit functions into account.

We can correct such a theory, but we will be misled as well if we explain <u>only</u> in terms of concepts, even our "odd" ones. We recognize that nothing consists <u>only</u> of conceptualized entities. <u>What misleads is this "only."</u> We can keep whatever we say connected to what is implicit in our thinking and saying that. With reciprocity we can move back and forth, expanding each in turn.

From working with the implicit we can generate more precise unit model concepts with which to correct the cognitive analysis where assuming units misleads it.

To correct the pitfalls of the unit model we can use our "odd" concepts like "behavior possibilities," "forming in the very coming," and our model of implying-occurring (and the characteristics of implicit functioning). We can keep these separate but generate more specific unit model terms to correct the theory.

For example:

III-3 Correcting the current theory. Three examples:

a) Behavior is more than motion:

Current researchers look for "sensory-<u>motor</u> coupling." Research will probably be much more successful if we look rather for sensory-<u>behavior</u> coupling.¹⁸

Noë, O'Regan, Gallagher and others miss the space of behavior possibilities because they think of behavior as motion. But motion is what the "external" logical grid splits off. Motion is a sophisticated product which requires an observer to defines this here and that there. It involves paths of changes in mere location. Behavior does not consist of motions and cannot be reduced to motion.

Noë says, for example, quite rightly that seeing an apple includes seeing the ways we could move with and around it. But motion is a separated abstract product of cognition. Behavior does not consist of this much later product. We might walk around the apple, or eat it, or save it for someone and tell them about it.

b) Behavior formation unites the intakes from the sense organs:

The "intermodal" effect which Gallagher quite rightly posits does not actually connect five <u>already separate</u> sensations. Our bodies imply five-sense objects. When a behavior is forming with just one sensory intake, that intake modifies the behavior. Then if there an intake from a second sense, this joins and modifies the ongoing behavior formation which already involves the first sensory intake. <u>They are joined in modifying a behavior formation</u>.

The new intakes from the separate organs modify a behavior formation which the body implies with five-sense objects. Therefore research does not find what connects the intakes even in newborns that have developed no neurological connections.

For example, we are walking down the road and see a fallen branch in the road ahead of us. Immediately we walk at an angle toward the right so that we will be passing the branch when we come to it. The branch is perceived as a solid five-sense object although we only see it. Or, we hear a car coming. Immediately we move sharply to the right and walk on the side of the road, although we have only heard, not yet seen the car.

With our human developments we <u>can</u> pay attention to the visual or sound patterns as patterns, if we want to consider only the visual or auditory patterns, as when looking at a picture. or listening to music, but experience is never made just of separated intakes, even if we have all five.

c) <u>Agency and consciousness are generated in the course of behavior formation.</u>

It is not the case that a whole behavior runs off and produces one feedback which must

It has been found that momentary intakes in the visual cortex contain nothing like the elaborate visual field we perceive. There is also a great deal more brain activity than can be accounted for by the momentary intakes, also in regard to early brain development and plants prior to behavior. Mahoney's (19__ pps 100-__ summary of puzzling neurological findings is very revealing in this respect, and in regard to early brain formation. These findings have been largely ignored for half a century because there was no theoretical vocabulary even just to discuss them.

then be separately perceived (just perceived) to give one the sense that one did what just happened. The perception and the bodily feel of it happen as behavior formation.

Behavior is a sequence of environmental interactions. The <u>formation</u> of the next bit of the sequence is the bodily effect of the environmental feedback. In the forming and coming the feedback which is this bit changes the implying into the implying of the next bit.

Behavior forms freshly each time, both when it is new, and when it has happened before. In order to walk or do anything we must perceive each bit of sequence to enable the next bit to form. A behavior sequence stops the moment the feedback doesn't enable the next bit to form.

That is why the infant lamb stops before the cliff (as I mentioned earlier). Although it has never seen a cliff before, the walking sequence cannot form with the environmental feedback of the abyss. Perception is not just a picture but a bodily-felt effect which forms the next bit. And, behavior formation has to occur freshly; it doesn't consist of repetition or memory.

There is a sense of agency since each next bit forms from the environmental feedback to what the body just did. The environmental feedbacks make the bodily changes which are the behavior. (See *A Process Model* VIA.) Therefore behavior formation is also the sense of agency.

The current theory misses this because it constructs agency as a series of separate perceptions at linear time points. The theory has no way to think of a forming process. And, it cannot consider body process and behavior before the development of discrete entities.

<u>III-4</u> The practice of thinking:

In my book *Experiencing and the Creation of Meaning (ECM)* I insisted that we need at least one term to stand for (what I called) "experiencing." I present how philosophy changes if the concepts are taken in relation to experiencing.

By "experience" most philosophers mean <u>their concept of</u> experience, not the experiencing we are (live, have, sense, find). To enter there is a kind of "<u>practice of philosophy</u>," an ongoing source for concepts, for the creation of meanings. The source is how we just now perceive, speak, and think. Of course it is the only way one can examine and discuss <u>how the implicit actually functions</u>.

If we think-from our ongoing thinking and speaking (not <u>only</u> from how we already think <u>about</u> them), we discover that thinking and speaking are very different from what is usually said about them. In how they actually occur we find a different kind of pattern, new concepts <u>about</u> thinking and speaking.

We have been thinking and speaking <u>both from and about</u> thinking and speaking. In speaking from the ongoing process of thinking and speaking, the words do double duty: They say what they are doing, since they speak from and about the speaking they <u>do</u> just now. Elsewhere I have written that "words can say what they do," which can sound mysterious. It becomes obvious when we speak from our speaking. On any topic (not only about speaking and thinking), what the words say instances <u>the process of saying</u>, <u>by which they say that</u>.

In philosophy we discuss concepts and language, so anything we say is just then also a sample of the ongoing process of thinking and speaking about thinking and speaking. Of course what we say about it instances the process. But also on any topic, whatever we think or say is an actually experienced sample or instance of thinking and saying that kind of thing (and the "kind" is not a conceptual classification, as I will explain).

Philosophy has always been on what I call the "metalevel," always concerned not only with what was said, but with how one could know such a thing. The words have always <u>done</u> the producing of <u>what</u> they tell about, but this present process was not directly employed. The process of thinking and speaking was discussed only in terms of concepts that were not the ongoing process but rather only the products of that process.

Philosophers have always <u>repositioned</u> the main words, used them in new ways with new concepts and distinctions, but have not avowed how they obtained these. They have not explained how acquiring new meaning is even possible for words. They presented only results, not how the results actually came, and why they can come.

How does Aristotle come up with a new distinction on almost every issue? How does Leibniz know about the monads? It seems philosophers just say: "I know this; you don't. So I'll tell you."

Some philosophers do speak about a "reflexive turn," but they <u>only</u> tell a conceptual story about it. (Aristotle's "grasping" [thigganein] and "thinking about thinking" is more than just a concept, but he stops right there.) Those who spoke of a reflexive turn didn't present their doing it so that we could find it.

The dialecticians claim to get their next steps just from contradictions in the concepts. But just contradiction cancels out. Asserting "X and not-X" would yield nothing if something more were not involved when we think. A paradox is a next-implied step that has not yet come. It is an invitation to think further, <u>on-in</u>, the experienced implying of the concept we need. We can <u>think on-into</u> it. It need not always generate a new concept; we can also just think better if we think with it. Plato visibly uses this but does not say so except dramatically via his characters.

Hegel does not do this. He does not employ or consider the implicit context of his concepts. He has a well formulated chain and asserts just that chain about each new concept he considers. He stays within the Kantian puzzle, only knocking out Kant's last reference to something more.

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Phenomenology should have made the turn to ongoing implicit process. It does take off from experiencing but fails to return to check its assertions against experiencing and let them reemerge from experiencing. We can systematically use the reciprocity I have been discussing. When we move back and forth we find each going further. Instead, most phenomenology continues merely conceptually and becomes like any other philosophy.

Even Husserl, who <u>did</u> return each time, did not understand that experiential conceptualizing must always imply further, and lead further and further in. He complained that he always found more and more. He lamented, "Others build edifices; I only dig deeper into the ground." He assumed that there are ultimate fixed forms. I think he was right to seek and value conceptual forms, but he didn't grasp the <u>reciprocity</u> I have been featuring, the implicit and the conceptual expanding each other. Of course we need the explications themselves, but they also carry forward on-into ever further implying.

Recent philosophers have all lacked this turn on its actual ongoing. Heidegger assumed that <u>only</u> the highest generalizations (which he called "Being") determine everything including all practice. Derrida considered everything including "metaphor" as deconstructed concepts, not as the ongoing metaphoric process which he used all the while.

Wittgenstein featured the doing of words, the implicit, and the bodily experiencing, ¹⁹ but he was convinced that this could not be further spoken about. If he were to talk *about* language, he said, it would be the old representational trap, only a story or picture.

These philosophers all pointed beyond mere concepts, but were convinced that speaking about <u>and</u> from is not possible. <u>And this was because referring to something implicit and speaking from it was unknown.</u> They all did it, but did not observe and avow doing so.

If we avow our use of the implicit (the "background") we can employ it systematically

See what he says about "verwicklet" and see the last part of PI: "The body is not a dumb block." See pain and "expectation" in my paper "What happens when Wittgenstein asks what happens when ..."

and in reciprocity with logical concepts to go much further, as I hope I am instancing.

There have been many critiques of the narrowness of our current science and the "loss" of the human world (for example, Poteat, Cavell) but there was no alternative. Now we have an *alternative approach* to philosophy and theory in *A Process Model*.²⁰

In Focusing and TAE (Thinking at the Edge)²¹ we have specific steps of practice -- <u>how</u> to think from directly referring. Of course everyone modifies these steps since they have to come from them. TAE is now being used in schools, and being improved upon.²² The first part of TAE can be used by anyone; the last part shows how to move from direct referring to theoretical concepts with logical relations.

What comes from directly referring comes from an entirely different, more bodily level. At first just a slight bodily sensation, it opens a whole field of relevant considerations carried forward from what was implicit. That is always very different from what one had thought. It shows that the body process implies cognitions. It shows that cognition is a special carrying forward of the present body-environmental interaction. Body life is situational.

In TAE in class the youngster asks: "Am I my body or do I have a body?" The question comes because evidently neither pattern fits. But it can seem that we make no sense at all if we answer: "Neither 'am' nor 'have,' rather *this* more intricate way you just found."

We don't settle just for "neither, nor," just two negatives. Rather, <u>this</u> way as a direct referent. Even without further steps we understand more with the "this," and further steps can also come there.

In this mode of thinking we retain the link to the direct referent also when we have a concept. The concept may be clear but it means the direct referent, "this way," and therefore can lead further and further.

²⁰ In A Process Model (available on http://www.focusing.org/process.html).

For TAE, see Gendlin, in press, Section IV; Gendlin 2009, Appendix (also in The Folio, 2004); Gendlin 2004 (also available at http://www.focusing.org/tae-intro.html).

²² Japanese TAE book, also others have written.

III-5 New powers for logical analysis:

Logical analysis is currently recovering. Until recently Rorty had convinced many Analytic philosophers of the severe limits of analysis. Postmodernism has made logical analysis seem hopeless. (See for example, Putnam [cited in TBP] and Margolis [See my Reply to Margolis.]²³

Postmodernists lacked the implicit. Therefore they viewed science as ungrounded construction. They assumed that other than logical conceptuality there is only disorder, contradiction, and limbo. Postmodernism was still the unit model, but used against itself. It did achieve one good result: People understood that ultimate formulations are not possible. But this is not something to hold against science and logic. Ultimate formulations are not possible because what exists implicitly is never equivalent to a formulation. Therefore it never grounds just one. That doesn't make formulations relativistic, just relative to something implicit which they explicate. Formulations are explications.

Let me cite some new analytic powers:

a) We can <u>differentiate</u> a strand of meaning:

We can differentiate the strand of meaning that was actually at work for us in any use we made of any term (word or phrase). We can do this with or without letting a direct referent come. We can find our specific strand of meaning just by attending to and speaking from what we implicitly meant (via the easy readiness to say more, to speak at length from anything we said or thought).

When we look for what strand from the concept is at work, we always find more specific strands. Why is this so? It is because the application of a concept does not merely impose the concept. The concept does not eliminate the intricacy but "crosses" with it, so that the concept is always more intricate in application than alone.

A technical concept may be well defined, but it always works with much more specificity in use. We can enter into our implicit sense of *this* use, and differentiate the more precise strand of meaning that is working here.

The crossing always yields more than pre-existed in the concept and what one applies it to. But what emerges is not plain new; it is a development (a carrying forward) although people say (with hindsight, retroactively) that all this "was" already implicit.

In a specific use the concept can reveal much more precisely what we meant (and what we did not want to mean).

Of course the strand can be further and further differentiated, but this is most useful only after we use the first differentiation for a while, so that our implicit knowledge develops further.

This power to differentiate is not generally known. It is assumed that a well-defined technical concept has the same meaning in any use, and that all of it is at work in each use. To know what strand is at work is very clarifying.

b) <u>Differentiating ordinary language</u>:

Somewhat differently but analogously, any bit of ordinary language can be differentiated

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²³ references

to find the more precise strand of meaning that is at work. That words are imprecise in common usage is well known. When a statement is taken alone it doesn't have a single clear meaning. In natural language there is not really a supposedly shared "propositional" meaning.

Anything we say is always much more intricate than the cultural generalities. In a serious conversation we must often discover what the other person means by a word or phrase. This is done best not by the threatening demand "define your terms," but gently and personally: "What more did you want this word to mean?" Similarly, one can ask oneself. Then one can think further with greater clarity.

c) New concepts:

Within our own specialty we have usually thought somewhat beyond the state of the field. Therefore it is not unusual that we know somewhat more. This can often seem just an unclear puzzlement but when we know a field well, then such an inarticulate "edge" can give rise to new concepts. It is a distinct move to assume that something in the whole unclarity may be *more precise* than the clear terms. We can wonder what that is, and invite it.

We will need new phrases. If we try to say it in the existing concepts, it will probably remain unclear. The new concept will come, first perhaps in tiny steps and odd phrases. These have to be received for a few minutes or days. Then they lead further. Eventually we have a new concept. If it is an odd kind, we keep it and simplify it to yield concepts of the usual kind.

d) Reversal; the specific can redefine the generality:

Since the strand is more specific it will at first seem to come "under" the general meaning of the term. But that old meaning may block further thought. We can let the more specific strand redefine the broader generality instead. But suppose it is very broad, perhaps the name of the whole field? The current assumptions in the field may make our strand seem quite impossible. We can redefine the field in regard to these assumptions so that our strand becomes possible. The specific definition has more parameters and can therefore redefine the more general.

e) A new set of units:

We can always generate a new set of units to enable a new logic to bite in at any point. We don't lose the existing set. We don't losen logic. Even the slightest addition, subtraction, modifying even one unit will disorganize the logical inferences we draw from a stable set of units. But there is no loss in creating a new set. Then if we wish, we can make a logical correction in the old set.

d) <u>Using many models and systems</u>:

Although different sets of units are not consistent with each other, anything we conceptualize in one set can be conceptualized in another. This is because we can have what is actually observed and bodily experienced, which is implicitly more intricate than any set of units.

So we no longer have to assume that there is nothing at the bottom, just the different floating forms. What we experienced by using one formulation is not lost if we change to another.

The conflicting systems and statements cannot be reconciled, but any <u>specific</u> conflict can always be further explicated. Any actual observation or experience obtained with one system can be formulated in any other system if one allows the differentiation and expansion. And, as we saw, analyzing in units expands the implicit. After a second conceptualization the implicit can now lead us to modify the first conceptualization as well.

This is also very little known. It is another advantage of thinking with what is implicit as well as with the logical formulations.

One can employ many ways of defining units, many philosophies, models, conceptual systems, and kinds of terminology. What is observed with one need not be lost (as it seems) with another. We still have the implicit and can let it define itself by expanding another system which had not shown it.

One rarely needs to go back and forth between systems because we can refer to what we need directly in the implicit. Meanwhile we get the benefit of finding what appears in the various approaches.

e) <u>Using an actual sample of what we want to formulate:</u>

When we have often observed something, we may feel no need to recall one specific occasion. But a particular event or observation is inexhaustible and implicitly quite different from any conceptual rendition. Knowing this gives one the advantages of using a particular sample. Then we can think from its inexhaustible implicit content, rather than from any already-formed concept of it. We can also check any concept by applying it to the sample. More specific corroboration or difference will then come from the sample.

f) Operational definitions:

Operations and referring to the implicit are two different ways of thinking with something independently of one set of words, concepts, and assumptions. Like the implicit, <u>operations are environmental interactions</u>. Insofar as something is defined operationally, it is no longer identical with its conceptualization, but can function in relation to many kinds of units, many kinds of models, concepts, and terminology.

By referring to the implicit we can find where a given research operation misses something with which we are concerned. That can lead us to devise a new operation. We need only ask ourselves what environmental action would show it, and then compare some situation with and without that action.

g) Choosing among research instruments:

In many sciences such as psychology the technical terms are still so general that many very different instruments exist ostensibly for the same variable. There are many instruments on offer to measure, for example "anxiety." If we hypothesize that anxiety will affect something we are studying, we need an instrument which will tap into the kind of anxiety we mean in our

hypothesis. To get an implicit sense for what an instrument actually measures, we administer it to ourselves. Then we find out whether it measures the "anxiety" we mean, or not. And, if no available instrument does, we can devise one (as I showed in f).

h) Protection against mistakes:

Thinking with the implicit along with many formulations protects us from mistakes we would might with only one. Even though just now we use only one, we don't make the mistakes which the other formulations make visible. Since all formulations we have ever employed now function in our implicit meaning, we don't make mistakes to which the other formulations have sensitized us. So we don't make the typical mistakes which those of our colleagues make who use only the formulation we now use.

This is another advantage of keeping the implicit with us along with our formulations. It too is a little-known point. People think they must give up the insights and observations which one's chosen formulation doesn't make visible. But this need not be so at all.

Human thinking need never again do without the systematic <u>practice</u> of thinking. Of course we also retain the unit concepts and technology. We don't lose the logical integrity of those concepts "alone." Rather, their power is expanded, corrected, and guided by reciprocity with the wider system.

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