Chapter 4 of *Matter and Memory*: "On the delimiting and fixing of images" John Protevi / LSU French Studies / Lecture notes: DO NOT CITE. protevi@lsu.edu / www.protevi.com/john/Bergson/MM4lecture.pdf

- 1. THE UNION OF SOUL AND BODY. In Chapter 4, Bergson sketches his method, which he hopes will let him approach the "metaphysical problem" of the "union of soul [/'âme] and body." Pure perception puts us in matter, while pure memory is a "penetration" into spirit. Matter and spirit is a difference in kind, yet the same "psychological observation" which attests to that difference also attests to their union.
- 2. We're at first blocked by a "DOUBLE ANTITHESIS" of extended vs unextended and quality vs quantity. It would seem that spirit would be the realm of inextension and quality and matter the realm of extension and quantity.

But *pure perception* puts us in "material extensity," which is not that of discontinuous extensity we conceive, but the "undivided extension" we perceive. B thus wants us to distinguish *extension* from both extended matter and inextended spirit. Similarly, pure memory allows us to see *tension* between quality and quantity.

In more detail: considering pure memory allows us to split the difference between heterogeneous qualities (matter as perceived) and homogeneous quantities (matter as calculated by science). We don't have to make a metaphysical postulation of pure quantity; it's enough that we practically ignore the very tiny qualitative differences of material cycles. In other words (anticipating later discussion), there is a frequency, a rhythm of repetition, of the light waves coming from an object. There is thus the same sort of qualitative heterogeneity to that rhythm as there is in our internal duration. BUT FOR PRACTICAL PURPOSES, we can ignore these very tiny nuances of different quality when it comes to material things and just treat them in terms of quantity. This means that matter grasped in concrete perception is a contraction into our perceptual duration of an "infinity of 'pure perceptions' that succeed one another." IOW, perception is a "translation of rhythms": the contraction of really fast material rhythms performed by temporal synthesis into our relatively slow perceptual rhythm, is a reification, a thing-making, of an underlying event-reality or process-reality. Reification just means "slowing down a process for practical purposes."

3. We now come to a discussion of the METHOD OF INTUITION. The source of our philosophical problems, the standoff between empiricism and "dogmatism" (idealism), is that we break up the continuity of experienced duration under the pressure of practical exigency and social life into objects and words. We then try to recreate a unity by adding together the broken apart pieces. (But you can't recreate an indivisible process by adding together the products of the process.)

What we need to do is to go "above the turn in experience." IOW, we have to identify the natural habits of reification that we engage in for practical purposes. These are fine to use for survival, but they don't let us think reality. And thinking reality is what philosophy is all about. Here some adherence to classical dualism by B arises: it's our body that gets in the way. B writes about "the impotence of an intellect enslaved to certain necessities of bodily life" [l'impuissance d'une intelligence asservie à certaines nécessités de la vie corporelle]" (MM4: 205 / 184).

This is not classic Greek complaining about the weakness of the body. Rather, B is complaining about the strength of the body.

At Phaedo 99, Socrates tells us of his "second voyage," where, instead of risking blindness by looking directly at things (which is like looking directly at the sun), he looks at "ideas" as hypotheses, which is like looking at an eclipse via its reflection in water. (There's a fascinating problem here when we consider that in Republic 6, the cave story, those who ascend to the surface, after a period of acclimation, are supposedly able to look at the sun / Idea of the Good.)

Or, in NE 10, Aristotle says that bodily fatigue keeps us from remaining with divine nous for very long – there is a very long history here of the "active intellect" that we can't go into.

These are not an exact match, as Plato and Aristotle are talking about how the body is too weak to incorporate the intensity of divine nous, whereas B is talking about the strength of the body-centered thought relative to philosophy or reality-centered thought. B has more of a Kantian angle: our bodily constitution *strongly inclines* us to think in a certain way, or better installs certain *habits of thought* which are unconsciously transferred from the practical realm to the speculative realm. The difference is that B thinks we can think reality in itself. In other words, we wants to rehabilitate metaphysics from its Kantian prison.

4. THE TURN IN EXPERIENCE. So what are we to do? We have to find the "turn of experience" and position ourselves there. There will be a "faint light" [*la naissante lueur* = "dawning glow"] which illuminates the "passage from the immediate to the useful." The "immediate" here = our intuitive contact with reality – that is, what I'm going to call the "sympathy" of our duration with durational reality. Or in other words, the feeling, the pre-reflective awareness, that we are temporal beings – and that everything else is too! "Useful" here = our spatializing habits of thought, useful for survival.

Using that "faint light" we have to "reconstitute" the "infinitely small elements which we thus perceive of the real curve." This is what I mean by "sympathy": our contact with the "real curve" of experience is a perception of "infinitely small elements." I would say this means we have to become aware of the way we condense fast material rhythms into our relatively slow perceptual duration. We have to somehow feel the difference between our rhythm and the rhythm of things: we have to feel the

contraction performed by our temporal synthesis in concrete perception.

In this way, the philosopher is like the mathematician who determines a function from the differential: both perform the operation of *integration*.

5. QUICK REVIEW OF CALCULUS CONCEPTS. "Derivation" or "taking a derivative" or finding "differential relation" = finding instantaneous rate of change [of position relative to time] = process of acquiring a velocity from positions.

A velocity is computed by taking the difference between two positions and dividing by the difference in time (dy / dx). The instantaneous rate of change is geometrically represented as finding tangent to a curve.

The opposite procedure is "integration," the process of obtaining the function from the derivates, that is, determining the function which relates two variables from knowing the instantaneous rate of change of one variable relative to another. In this way, for example, we can find the function that will allow us to calculate a position from velocities (or a velocity from acceleration).

A position for a specific time is computed by summing all intermediate velocities to a starting position. Integration is geometrically represented as finding the area under a curve by addition of areas of ever smaller rectangles ("the method of exhaustion" is the name of an older method).

6. BERGSON AND CALCULUS AS MODEL FOR PHILOSOPHY / METAPHYSICS. In integration we take a curve and find the area under the curve by slicing the curve into ever smaller rectangles. This is what our spatializing habits of thought do with movements. If we become aware that this is what we are doing, we get a glimpse of the reality of indivisible movement that lies underneath this practice of ours.

In the "9 theses" section of *Introduction to Metaphysics* (1903), B returns to this notion. Intuition is a "violent reversal" of our spatializing habit of thought. We have a hint of this reversal in calculus, which is an attempt to think becoming, to follow growth of magnitudes. Now it is not yet philosophy, being only the science of magnitudes via symbols. But metaphysics can abstain from symbols and stay with intuition. To do this, it has to realize that the "quantity" created by slicing method of integration is always a "nascent quality." IOW, quantity is always the "limit" of quality: it is the ignoring of the qualitative differences in the rhythm of things in order to create a practically useful quantity with which we can calculate. For example, there are subtle shifts in rhythm or qualitative nuances in the light waves coming from a thing. But we can ignore them and constitute a specific and fixed frequency with which we can calculate. But once we know we are doing this, we can go back to those subtle shifts, those qualitative nuances, and pay attention to them as reality. In this way, metaphysics can extend "generative method" of calculus to all qualities; thus metaphysics is to "operate differentiations and qualitative integrations."

Chapter 4 of *Matter and Memory*: "On the delimiting and fixing of images" 2nd lecture John Protevi / LSU French Studies / Lecture notes: DO NOT CITE.

1. PREVIEW. The heart of Ch 4 is some really great philosophy. B lays out a consistent monism, a "plane of immanence," in terms of duration. Duration = memory = process = time = being = reality. We can get in touch with this processual reality via our own being as duration. But to do that we have to recognize and surpass our spatializing habits of thought, which alienate us from our true durational being.

This "getting in touch" is a matter of *intuition*. Deleuze insists intuition has a method: (1) analyzed badly-formed problems (due to spatializing habits of thought); (2) discover genuine differences in kind (vs. mere differences in degree); (3) think in terms of time (we already feel in terms of time, so we have to raise our pre-reflective self-awareness to verbal level, w/o succumbing to reification of language).

Last meeting we discussed how B presents his method in Ch 4 in terms of the "turn in experience."

B gives us four theses to examine: (1) every movement is indivisible; (2) there are real movements; (3) all division of matter into separate bodies is artificial; (4) real movement is transference of a state, not motion of a thing.

- 2. EVERY MOVEMENT IS INDIVISIBLE. These arguments should be familiar from TFW. The problem is the confusion of the space traversed, which is divisible, and the motion, which is indivisible. Motion = duration = process; the space traversed is the "product" of this process. From this confusion arise Zeno's paradoxes. These are tied in with the demands of biological and social existence, which incline us to practical / utilitarian reification.
- 3. THERE ARE REAL MOVEMENTS. Bergson here distinguishes his treatment of motion from that in mathematics and physics. Both are tied to common sense's practical reification. Mathematics refers movement to distance from a reference point; it thus only retains from any motion the "changes in length" of the space traversed. Physics on the other hand does try to deal with motion as an "indisputable reality," but it still refers motion to space rather than thinking it in itself as durational process.

B then enters a discussion concerning absolute vs relative motion. Do things move in a container-like space which does not itself move? This is the thesis of *relative motion in an absolute space*. Or is it that motion entails a change in "aspect" of the whole? This possibility arises because from the purely scientific point of view, you can't say whether things move relative to a fixed reference point, or whether the reference point itself is moving relative to the "thing." This is the thesis of *absolute motion*, that is, *change in aspect of the whole*.

Recourse to the notion of "force" as distinguishing relative from absolute motion won't do, B says. What we have to do is "draw out of the movement the mobility which is its essence." How do you do that? Eventually, B will say we do so from a sort of sympathetic identification of our inner duration and the duration of things. But we're not there yet. Here, he just asks us to notice that from the inside, "I grasp the reality of movement when it appears to me, within me, as a change of *state* or of *quality*" [B's emphases]. But the sensible qualities of things change too as I perceive them.

Here we have "two ends of a chain": inner muscular sensation [affection] and outer perceptions, both of which entail changes in quality. Between them we have the movements of external "bodies." How can we tell when one of them is moving and when it is at rest? *But the very structure of the question reveals a hidden presupposition!* Namely, that there are separate bodies which move about in a container-space, rather than a whole whose aspect changes. This takes us to the 3rd thesis.

4. ALL DIVISION OF MATTER INTO INDEPENDENT BODIES WITH ABSOLUTELY DETERMINED OUTLINES IS AN ARTIFICIAL DIVISION. Now we're getting somewhere! All the way back, philosophy has always been all about upsetting our common sense assumptions, and this one is deeply rooted.

B's analysis rests on the continuity of the perceptual fields of vision and touch. Instead of saying that things move around in a container-space, why not say that the whole has changed, "as with the turning of a kaleidoscope"? If we really pay attention to our immediate consciousness – to things as they appear when we have bracketed our common sense assumptions and turned off our spatializing / reifying habits of thought – then we see "a moving continuity is given to us, in which everything changes and yet remains." The problem comes when we dissociate permanence and change, assigning permanence to things and change to "homogeneous movements" in a container-space.

It's no good appealing to science here, because *science and immediate cness are coming to agree with each other*. This is a huge change from TFW! Science is beginning to show the "reciprocal action of all material points upon each other" (221 / 197). (Recall here the "perception" of "any material point whatsoever" from Ch 1.)

Why then do we experience an "irresistible tendency" to think in terms of a universe of independent bodies that move relative to each other in a container-space which allows for measurement of motions? The answer is the *necessity of living*. You have to eat, and in order to eat, it's useful to identify this thing here in front of me as a piece of food which is separate from me – for the time being!

But as we should be able to anticipate by now, we get into philosophical trouble when we translate our utilitarian reification into the speculative realm. Here again, B

appeals to modern physics, in which "the materiality of the atom dissolves more and more" (223 / 199). We might imagine the reciprocal action of all parts of matter as bodies and threads of force, but this is just our biological needs talking. What science shows us is not a separation of bodies and forces as fixed ontological registers but a convergence of them: "We see force more and more materialized, the atom more and more idealized, the two terms converging toward a common limit and the universe thus recovering its continuity" (224-225 / 200). (Milič Čapek in his Bergson and Modern Physics (Boston: Riedel, 1971) lauds B on his prescience in this passage and in all the analyses of Ch 4.)

IOW, the vision of modern physics is that reality is a field of matter-energy with differing levels of energy = different frequencies of vibration. What we see as solid bodies is just low-level energy: it's the same "stuff" as light, it just moves slow, congealing and resonating rather than dissipating. Or rather, its dissipation is too slow for us to perceive it as an event or process, so we see it as a body. Bodies are just the effect of our utility-driven and biologically evolved perception. Instead of bodies, stuff, matter, things, science shows us "pervading concrete extensity, modifications, perturbations, changes of tension or of energy and nothing else" (226 / 201; B's emphases). The "and nothing else" should shock, amaze, and impress you. Bottom line: there are no things; there are only processes.

5. REAL MOVEMENT IS RATHER THE TRANSFERENCE OF A STATE THAN OF A THING. Here B creates what is to me a masterpiece of philosophy. He dives in and tries to show that all things are durational, not just humans. Remember that in TFW he created a dualism between inner quality and outer quantity. But here he wants to say that there is outer quality as well, that the being of all things is that of qualitative multiplicity, that the being of all things is unrolling, qualitatively differing, process.

He has then to distinguish between the inner quality of things and the outer quantity created by our utilitarian perception: "do real movements present merely differences of quantity, or are they not quality itself, vibrating, so to speak, internally, and beating time for its own existence through an often incalculable number of movements?" IOW, everything has a rhythm or characteristic modulation of its frequencies; our job as philosophers is to think a universe in which such processes are the basic reality. "These movements, regarded in themselves, are indivisibles which occupy duration, involve a before and after, and link together the successive moments of time by a thread of variable quality which cannot be without some likeness to the conintuity of our own consciousness." The "thread of variable quality" is the modulation of frequency, the often subtle shifts in rhythm, as a process unrolls.

So things all beat at different frequencies; sometimes the rhythm of our consciousness – the frequency of our duration – meshes enough with that of another process (we are a process, not a thing) that we can experience it as a process, not as a thing. What this entails is a convergence of quality and quantity. Whether we perceive one or the other is just a matter of the meshing of rhythms of duration. Sometimes we can even feel the shift from quality to quantity – and feeling that shift

means we can understand the way perceived quality is just the contraction of really fast frequencies, that is, is based in quantity, but a quantity that is in itself durational: "In cases where the rhythm of the movement is slow enough to tally with the habits of our cness ... do we not feel the quality perceived analyzes itself into repeated and successive vibrations, bound together by an inner continuity?" (203).

We're kept from this realization by our biological habits of thought. What we have to do is "go beyond sensation": we have to realize that we only perceive what is of interest to us, but that reality is wider than that: "as if this sensation itself were pregnant with details suspected yet unperceived" (204). B talks about this excess over perception with a depth metaphor: "motionless on the surface, in its very depth it lives and vibrates." It's this ability to "suspect" what lies beyond utilitarian reification that I want to call, for lack of a better term, *durational sympathy*.

The road to this is via recognizing that our duration has its own rhythm into which we translate the rhythms of other things, via the temporal synthesis of concrete perception: "the duration lived by our own cness is a duration with its own determined rhythm" (205). So just seeing colors is a massive contraction of billions of vibrations, billions of waves of electromagnetic energy.

But in reality "there is no one rhythm of duration; it is possible to imagine may different rhythms which, slower or faster, measure the degree of tension or relaxation of different kinds of consciousness and thereby fix their respective places in the scale of being" (207). This is an amazing breakthrough for B; he decenters the humanism of TFW at one stroke. It's hard for us to think like this, but B offers a description of stages of reality and then a procedure to think them.

First the stages of reality: (1) You must first imagine the world w/o your cness. (2) things then "draw back into themselves," that is, into their own duration (which we have access to by science). (3) Sensible qualities do NOT vanish (as they would for many other philosophers, realists and idealists alike), but are "spread and diluted" into the rhythm of fast, physical duration. (4) matter has thus become pure vibrations, some faster than others, but all "linked together in uninterrupted continuity." To express this last stage, B gives us an image. Like all images, it is a reification. But it is carefully chosen and perhaps can make you think differently than we usually think: all the vibrations of the universe are "bound up with each other, and traveling in each direction like shivers through an immense body" (208).

Now the procedure: (1) connect together discontinuous bodies of daily experience. (2) see the vibrations underneath their qualities. (3) focus on those vibrations as mobilities in themselves (not as motions of a thing – you do this by abstracting them from container-space). Here is the important point: you focus on vibrations as mobilities; and mobility is that "undivided act which our consciousness becomes aware of in our own movements" [cet acte indivisé que votre conscience saisit dans les mouvements que vous exécutez vous-même] (234/ 208).

This is what I want to call *durational sympathy*. You have to put yourself in the place of the material universe and feel its movements the way you feel your own. This allows a "vision of matter, fatiguing perhaps for your imagination, but pure, freed from all that the exigencies of life compel you to add to it in external perception" (208). "Add to it" is a little unfortunate, given B's insistence on pure perception as subtraction. But "add" is okay, since in concrete perception, memory-images come flooding in. And those images are those of bodies, since concrete perception is *utilitarian reification*.

So that's B's challenge: can you call upon your durational sympathy to overcome your utilitarian reification?