

INTRODUCTION

[written in 1910, thus 14 years after the first edition of MM in 1896]

1. B uses the same word [*esprit*] when he talks about spirit and matter [*esprit* and *matière*] as general metaphysical problem and when it comes to the determined region of human beings. The translator uses “soul” though to talk about the determined region (“soul and body”), but we need to note that B uses *esprit* and *corps*. The important thing is that he doesn’t explore all the metaphysical issues of spirit and matter, but only insofar as these issues relate to the question of the relation of *esprit* (“soul”) and body.
2. THE NOTION OF “IMAGE” IS PARTICULARLY DIFFICULT (for me at least). B says it is the perspective of “common sense” and that it is between idealism and realism. It is more than an idealist representation (an internal mental picture, as if on a screen inside our heads viewed by a little man [a “homunculus”]) -- common sense wouldn’t accept that external objects don’t exist; that the only things that exist are those internal pictures. But on the other hand, it is less than a realist thing – (here B talks about the split btw primary [shape and extension] and secondary qualities [e.g., color] – for common sense, the color is in the thing, not just in our heads. So the object is a “self-existing image” and matter is the “aggregate of images.”

We see here B’s typical move of trying to outflank hardened philosophical oppositions. In Deleuzian terms, we could call this a “plane of immanence,” one of D’s terms for monism. But we’ll have to remember that MM is ultimately “dualist.” Which will mean that memory has a difference in kind from images: memory is virtual, and must be actualized to become an image.

3. MEMORY IS THE KEY TO THE STUDY OF SPIRIT AND BODY, helping us avoid epiphenomenalism and parallelism. B sees this as a badly-formed problem space.

Study of consciousness is huge today; one of the reasons MM is worth studying. But why study an old theory; why not spend your time on up-to-date stuff? I say study of the history of philosophy is worthwhile even if you don’t buy all of B’s ideas at first (or even at the end of the study – but you can’t know that starting out). Of course I have a self-interest in saying that as a specialist in the history of philosophy. But I don’t study the history of philosophy as an antiquarian; for me, it is a source of challenges. You have to have an open mind, and let B challenge your pre-conceptions. That way you might be able to avoid getting into an insoluble – that is, badly formed – problem space.

CHAPTER 1

1. Back to “images.” There are TWO TYPES OF IMAGES: (1) known from outside, via perception, as field of universal interaction. These interactions are calculable by laws of science, so there is no novelty in the future: “the future of the images must be contained in their present and will add to them nothing new.” (2) *one* of these images is *also* known from inside by affection: my body. An affection is an “invitation to act” but with “leave not to act.” It is an inclination rather than a necessity. It sits between the motions I receive from outside and the movements I prepare in reaction. It adds something new to the universe.
2. Here is one of B’s most important contributions: the BIOLOGICAL (AND HENCE PRACTICAL) PERSPECTIVE ON PERCEPTION AND COGNITION. For B, the body is a “center of action”; it doesn’t produce representations (as pictures of the world with no reference to the body’s potential action – we’ll have to abstract from the contemporary debates about “action-oriented representations” as recapped in Mike Wheeler, *Reconstructing the Cognitive World* [MIT, 2005]).

B will certainly admit that perception varies with brain states, but he won’t say that perception is the creation of a picture / representation: the brain is a “telephone relay,” coordinating sensation and motion. We have to be careful with this image: we now know there is lots of brain traffic going from motor centers to sensation centers: it’s not a one-way street: sensation – processing – motor commands. [B recognizes this at MM2: 112 / 103: “the recent discovery of centrifugal fibers of perception”.] In fact, most brain activity is internal to the brain, rather than incoming or outgoing.

Perception is oriented to practice; it is the way an organism navigates its world. We have to say ITS world, since perception is selection or condensation: from the total interactions each image has with all others in the field of universal interaction, perception is the selection of that which interests the organism. Perceived images are in fact for B sketches of potential action. The contemporary connection is with JJ Gibson’s “ecological perception” and his notion of “affordances.”

This is a profound move.

It’s at the root of B’s critique of both idealism and realism. And it marks B’s orientation on the side of pragmatists and phenomenologists. Part of the fight (as classically seen) btw Heidegger and Husserl is that the former accused the latter of having a theoretical orientation instead of having a primordial practical orientation, with theory being a modification of practice. Lots of contemporary Husserlians reject that accusation. There is a lot to say here about B and phenomenology. Let me just say that for now I agree with Len Lawlor (*The Challenge of Bergsonism* [Continuum, 2003]) that B is not a phenomenologist: “if a phenomenology of perception consists in showing how conscious syntheses constitute the perception of an object, then this is not Bergson’s project. He is not showing how cness casts light on things in order to let them be perceived, instead, he is showing us how cness, that is, conscious

perception, is deduced from matter” (18). IOW, there is no constitution of the object by [transcendental] consciousness (even in the Merleau-Ponty sense of the body as subject); rather there is an unconscious selection from the object as part of the field of universal interaction to form the perceived object as sketch of potential action. It's not about processing by the subject to put the object together; it's about subtraction or diminution. Light doesn't come out from the subject; light comes from everywhere, including from the object, and passes through the subject, which only reflects what interests it.

Regarding Heidegger and B, H parts company with B by not thematizing the body. Several things to notice here: (1) some cog sci of the Dreyfus school picks up on the early Heidegger and his insistence on the primacy of practice. Mark Okrent, a Dreyfus student, makes the connection with pragmatism in *Heidegger's Pragmatism* (Cornell, 1998), something that Richard Rorty does as well. (2) the “enactive” school of cog sci refers to phenomenology (Husserl, Heidegger, MP); some distance themselves from Gibson (Varela, Thompson, Rosch, *The Embodied Mind* [MIT, 1991]) while others are more sympathetic to Gibson (Alva Noë, *Action in Perception* [MIT, 2004]). The enactive school has not (yet?) come to grips with Bergson, although there is one guy who is attempting to bring B into the cog sci discussion: Stephen E Robbins.

3. Let's move now to the notion of “PURE PERCEPTION.” B proposes it as a way to account for the illusion that cness is *caused* by the brain (rather than the brain being the organ whose selection allows a virtual image to form and in whose motor mechanisms memory images are actualized). Pure perception is a thought experiment, a limit case. It never happens in real life, bcs actual perception is always mixed with memory. (We'll discuss memory in Ch 2 and 3.) Pure perception is instantaneous and “molded to the object.” It is a “virtual image.” Only our bodily interests actualize it (these interests, as we will see in Ch 2, take the form of nascent movements, or motor schemas, that form body habits).

A key passage is this one: “perception of an unconscious material point whatever, in its intantaneousness, is infinitely greater and more complete than ours, since the point gathers and transmits the influences of all the points of the material universe” [MM1: 35 / 38].

This means our animal perception is subtraction from this infinite “material” perception. B gives a series of complex light / photograph metaphors. Objects beam light to us; our interests act as mirrors. So, many physical influences pass through us like the way light waves pass through a translucent medium. But perception picks out what is of interest to us and reflects that light back to the object. Illuminated in that way, we see the side of them that interests us. As this sort of interest-based reflection, perception creates a “virtual image.”

The problem with light metaphors is that they tempt us to think of ourselves as a camera: our eyes are shutters and our brain is the film, which when exposed to light

develops the photograph inside our head. But for B, the photograph is already developed “in the very heart of things and at all points of space” [MM1: 36 / 38]. So we have to twist the image: the photograph is translucent, and our bodies are behind it as a black screen on which the virtual action appears.

Robbins has a fascinating take on this, comparing brain to reconstructive wave in a hologram. A little background is needed. A hologram is a record of interference patterns of two laser light beams: one that hits the film directly and another that reflects off the object. The direct beam has a certain frequency; when another beam of the same frequency hits the film, the image of the object is reconstructed, hanging out in space as a “virtual image.” For Robbins, the brain is the reconstructive beam, and all of reality is the hologram, a set of mutually interacting “dynamic interference patterns.” So the brain “decodes” the virtual images, according to its frequency. Robbins relates that frequency to the speed at which we are able to act: so the faster our brain frequency, the slower the external motion, and the more fine-tuned our actions. He gives the example of a fly’s wings. They are a buzz at our normal speeds, but if we speed up our brain’s frequency, they might seem to us as slow flapping, maybe even slow enough that we could reach out and stop just one flap, rather than just blundering into the buzz, like sticking your hand into a fan. Hence perception is tied to bodily capacity, just as in B.

Let me repeat this key passage from MM1: 35 / 38: “perception of an unconscious material point whatever, in its instantaneousness, is infinitely greater and more complete than ours, since the point gathers and transmits the influences of all the points of the material universe.”

This is very important: we see here B’s “panpsychism.” Connection with Whitehead and Bohm. Compare the “strong continuity thesis” of “mind in life” (e.g., Evan Thompson, *Mind in Life* [Harvard, 2007]). This latter school makes no commitment to panpsychism. To be fair, the “psyche” of panpsychism, the “perception” of material points, is never said to be full-blown “mind” on the model of human self-consciousness. (See here Antonio Damasio’s notions of levels of consciousness and levels of self.) The important point is that human consciousness is seen as expansion of primitive awareness: whether that is limited to organisms, or extends below to material points.

There’s a tie-in here too with notions of “quantum consciousness.” The question would be: even if human consciousness depends on quantum effects, does that mean that everywhere there are quantum effects (that is, everywhere), there is consciousness there too? But what form of “consciousness”?

4. We know that pure perception is instantaneous. WHEN DOES ACTUAL PERCEPTION OCCUR? In the hesitation, in the zone of indetermination (remember we have to think in terms of time!). When there is automatic habit, there is no perception: to use a Heideggerian example (not an exact fit): you don’t even see the door handle, you just turn it. What fills up the hesitation is memory. B notes two

types at this point: *souvenirs* or “recollections” and temporal synthesis, which makes the present swell and thicken. (It’s very important to distinguish instant as mathematical point from present as experiential moment.) Pure perception is an instant snap shot; compare the notion of space in *TFW*. Note the difference: in *TFW*, space is an independent reality opposed to spirit; in *MM*, as pure perception, it is “lowest degree of spirit” as we will see in Ch 4. (Lawlor, 21).

5. WHERE does perception occur? It occurs OUTSIDE WITH THE OBJECT. It is NOT the projection of an inner process. It is the construction (via subtraction) of a virtual image (made actual by memory-images). But it seems to us AS IF perception occurs inside and is projected outward. B spends many pages explaining how this “as if” feeling develops.

Chapter 1 of *Matter and Memory*: “On the selection of images”: Second lecture
John Protevi / LSU French Studies / Lecture notes: DO NOT CITE

1. PERCEPTION AS SENSORI-MOTOR. Bergson writes: “the truth is that perception is no more in the sensory centers than in the motor centers; it measures the complexity of their relations, and is, in fact, where it appears to be [*et existe là où elle apparaît*]” [that is, outside in the objects, not in the head or even in the body] (45F / 46E).

So we see Bergson defining perception as the measurement of the complexity of the relations of sensation and movement. This is precisely the formula given by ALVA NOË in his *Action in Perception* (MIT, 2004). For instance, Noë writes, “the basis of perception, on our enactive, sensori-motor approach, is implicit practical knowledge of the ways movement gives rise to changes in stimulation” (8). Thus, failures of perception are due to a “breakdown in our mastery or control over the ways sensory stimulation changes as a function of movement” (10).

Note the equation of “implicit practical knowledge” with “mastery or control.” Noë goes on to compare his formulation with Kant’s famous line “intuitions without concepts are blind.” Kant’s is a hylomorphic process: formless intuitions are the material input to a production process; they are given form from transcendent sources, first by space and time as forms of outer and inner intuition; then by concepts of the understanding. By contrast, Noë’s formulation is that what completes intuition is “knowledge of the sensorimotor significance of those intuitions.” This “knowledge” is not linguaform or conceptual, but is “sensorimotor bodily skill” (11). I think B would agree with this.

2. What I’m interested in is the ONTOLOGICAL STATUS OF THIS SENSORIMOTOR SKILL. A skill or capacity isn’t the same as that which results from the operation of that skill. (Aristotle was all over this in the *Metaphysics*: skill versus exercise of skill is the prime route to the distinction of *dynamis* and *energeia*).

One way to approach this question is through time, or the TEMPORAL STRUCTURE OF SKILLS AND EXERCISES OF THOSE SKILLS. First, to follow up on Noë's Kantian reference, note that skills are not concepts. That's because concepts have self-presence: they are self-identical over time. A concept doesn't develop or get old (at least on a certain non-historical sense of the mature adult possession of a concept; see Lakoff and Johnson, *Philosophy in the Flesh* for a neurobiological notion of concept, and of course Piaget for the developmental acquisition of concepts). But a sensorimotor bodily skill does in fact develop over time; it can get old; it might need to be sharpened by exercises.

Now insofar as self-presence is, following Heidegger and Derrida, the sense of Being in "metaphysics," then a concept exists (following Plato, the Ideas are being par excellence), but A SKILL IS "NOTHING": it has no self-presence, but is the capacity to predict or maybe better manipulate the relation between movement and sensation. Now at first glance, *pace* Bergson in Ch 1 of TFW, a movement is actually present (let's pretend you can measure it; it has a certain speed and direction); a sensation is actually present (let's pretend that you can measure it; it has a certain intensity).

But let's bring Bergson back into the picture. After our reading of TFW, it's vital to note that we never get "a" movement or "a" sensation. We don't have states; we have processes. So what we have are changes in the tone of our inner melody: that is, changes in ever changing movements and changes in ever changing sensation. In other words, all we ever have are changes in rates of change: speeding up / slowing down / changing direction; that is, all we ever have are MODULATIONS OF AN ONGOING PROCESSES.

But it's EVEN MORE DIFFERENTIAL than that, because our perceptual capacity / sensorimotor skill is only the capacity to modulate the ever-changing relation not just in a single process, but among all the mutual effects of multiple ever-changing processes: perceptual capacity is the ability to change the rate of the linked rates of change of movement and sensation; it can modulate the "metaprocess" or the "emergent process" that is the relation of the two processes of movement and sensation.

DELEUZE SUGGESTS THE TERM "VIRTUAL" for these sorts of purely differential structures. In *Difference and Repetition*, he calls these differential structures "Ideas." In *A Thousand Plateaus* they are called "multiplicities" or "abstract machines." In DR, an Idea is defined as a set of differential elements (movement and sensation as mutually defined), differential relations among the elements (linked rates of change of movement and sensation), and singularities (thresholds or sensitive points that arise in those relations, points at which the behavior of the system undergoes qualitative change: a new perception steps coalesces). I think this lines up pretty well with perception as a skill that enables us to navigate the differential elements, relations, and singularities we discuss above.

So the ontological status of a Deleuzian Idea is “virtual,” that is, purely differential. So I'd say THE ONTOLOGICAL STATUS OF PERCEPTION AS A SENSORIMOTOR SKILL IS VIRTUAL.

3. Let's look at NOË'S USE OF THE TERM “VIRTUAL.” At 50 he writes “all the detail is present, but it is only present virtually, for example, in the way that a web site's content is present on your desktop.” He continues: “To experience detail virtually, you don't need to have all the detail in your head. All you need is quick and easy access to the relevant detail when you need it.” So here “virtual” means *offline, but accessible*.

I'm not sure this fits with Deleuze, but maybe it does. If to be “present virtually” means that the detail is already formed, but just not under in the field of vision, then no. But I don't think that's what Noë means, despite the “offline” metaphor (the typed pages of a website are already formed, but just not in the field of vision). To be virtually present *to* a organism means the perceptual detail is not yet formed, but *could be* formed, by the proper manipulation of the relation between movement and sensation. The dative is important I think: to be virtually present to an organism as that which could be formed, versus that which is formed “in itself” and just waiting there to enter the field of vision (conceived as a camera). There are massive questions here in the relation of realism and phenomenology / enactive cognitive science.

Noë tackles this question in Ch 7. He uses the PHENOMENOLOGICAL STRATEGY of defusing the realist (world is pre-formed and we capture a picture of it in our heads) and idealist (world is formed in our heads) split. Rather, experience is in the middle:

If the content of experience is virtual, in this way, then there is a sense in which the content of experience is not in the head. Nor is it in the world. Experience isn't something that happens in us. It is something we do; it is a temporally extended process of skillful probing. The world makes itself available to our reach. The experience comprises mind and world. Experience has content only thanks to the established dynamics of interaction between perceiver and world. 215-216.

Noë argues against splitting experience into occurrent and merely potential factors or part. Any candidate for what is “occurrent” is itself “virtual all the way in,” so that “experience is fractal and dense” (216). We might use a Deleuzian distinction at this point: THE VIRTUALLY PRESENT DETAIL DOESN'T “EXIST,” BUT “INSISTS”: it “is” only as that which could be actualized out of its differential condition.

4. This reminds us that don't just have perception as a (virtual) skill, we also have (actual) perceptions. In fact, in technical terms, DELEUZE IS A “TRANSCENDENTAL EMPIRICIST,” which means that for him the virtual is never “bigger” than the actual into which it explicates itself (Deleuze has an implication /

explication set of terms with which to discuss virtual differentiation and actualization / differentiation). This means that you never have a virtual that isn't also in the process of being actualized. How does this actualization work?

Deleuze says the virtual as purely differential is actualizable as differentiation or the production of divergent lines. Actualization = differentiation = integration. So we have to think perception as integration of a differential field (I don't know if I'm using this in a technically correct manner, but what I mean is a set of linked rates of change that need to be actualized by being given real values).

On this question, the Deleuze line would be form is self-identity, and the virtual is purely differential, so ACTUALIZATION IS MORPHOGENESIS, that is, bringing into form or self-identity. But that morphogenesis isn't hylomorphic: we're not imposing form on formless matter, we're guiding the implicit forms of worldly material to coalesce. I'm reading "implicit form" as Gibsonian "affordance": it needs to be completed by an organism: different organisms connect with different affordances even when they are based on the "same" object. So the "thing in itself" is scattered or dispersed or "virtual": it all depends on the relation made with a particular organism. (Though *The Embodied Mind* tends to criticize Gibson as too realist: I need to think through this more). And I think this can be put into connection with Noë's notion of enactive phenomenology: the world has some structure, but not fully pre-formed: it needs to be met half-way: phenomenology is the study of the way the world reveals itself: it's not introspection into the picture-creating activity of a subject.

5. I think that actualization as integration of a differential field is close to what is called in DYNAMIC SYSTEMS TERMS THE "COLLAPSE OF CHAOS" (title of a very good popular science book by Ian Stewart and Jack Cohen.) This view of perception correlates very nicely with some neurodynamics work, particularly the separate work of Walter J. Freeman and Francisco Varela ("resonant cell assemblies" or RCA). See the draft article on Evan Thompson's U Toronto website. The difference is that Freeman concentrates on the brain, whereas Varela and Thompson as enactivists think in terms of brain-body-world loops.