

The Principles of Psychology (William James)

Methods of Investigation:

1) Introspection

- "The word introspection need hardly be defined - it means, of course, the **looking into our own minds and reporting what we there discover.** "
- "*Everyone agrees that we there discover states of consciousness.* So far as I know, the existence of such states has never been doubted by any critic, however skeptical in other respects he may have been.
- "All people unhesitatingly believe that they feel themselves thinking, and that they distinguish the mental state as an inward activity or passion, from all the objects with which it may cognitively deal. *I regard this belief as the most fundamental of all the postulates of Psychology,* and shall discard all curious inquiries about its certainty as too metaphysical for the scope of this book" (p. 185)

2) The Experimental method

- "**No general description of the methods of experimental psychology would be instructive to one unfamiliar with the instances of their application,** so we will waste no words upon the attempt" (p. 193)
- It there's no point in describing the experimental method, we can nevertheless list potentially fruitful topic domains; e.g.,
 - "the connection of conscious states with their physical conditions, including the whole of brain-physiology..."
 - "the manner in which simple mental states *influence each other*, call each other up, or inhibit each other's reproduction "
 - "the elementary laws of oblivescence and retention" (p. 193)

3) The comparative method

- This method supplements introspection and experimental research (and presumes their results).
- Here, **results in one domain of inquiry are employed to throw light on another domain.**
 - "So it has come to pass that instincts of animals are ransacked to throw light on our own; and that the reasoning faculties of bees and ants, the minds of savages, infants, madmen, idiots, the deaf and blind, criminals, and eccentrics, are all invoked in support of this or that special theory about some part of our own mental life" (p. 195).

Knowledge of Acquaintance vs. Knowledge-About

James distinguishes between "two kinds of knowledge" (p. 221)

1) Knowledge of Acquaintance

- This is an experiential, or "lived", knowledge.
 - "I know the color blue when I see it, and the flavor of a pear when I taste it"
 - "but about the inner nature of these facts or what makes them what they are, I can say nothing at all."
 - "I cannot impart acquaintance with them to anyone who has not already made it himself."
 - "What we are only acquainted with is only present to our minds; we have it, or the idea of it." (p. 221)
- The colloquial term "*feeling*" corresponds roughly to this dimension of knowledge (p. 222)
 - "Through feelings we become acquainted with things..."
 - "Feelings are the germ and starting point of cognition..." (p. 222)
 - For James, "feelings" include:
 - Emotions
 - Sensations

2) Knowledge-about

- Here we have moved from the domain of *feeling* (lived experience) to *thought*.
 - For James, "thoughts" include:
 - Conceptions
 - Judgments
- "Through feelings we become acquainted with things but only by our thoughts do we know about them."
- "Feelings are the germ and starting point of cognition, thoughts **the developed tree**" (p. 222).

It goes without saying that scientific psychology is knowledge *about* human reality rather than simply knowledge *of acquaintance*. I'm reminded here of Stephen Pepper's distinction between common sense and refined cognition. But refinement in the domain of knowledge is a risky venture. As such, it is appropriate here to consider James' account of the *mistakes* frequently made by psychologists in their quest for knowledge.

Specifically, James identifies two "sources of error in psychology" (p. 194):

Sources of Error

1) The misleading influence of speech (p. 194)

- **There is a profound temptation to assume that the mere existence of a word implies a substantive entity to which that word corresponds.**
 - "Empiricist writers are very fond of emphasizing one great set of delusions which language inflicts on the mind. **Whenever we have made a word**, they say, **to denote a certain group of phenomena, we are prone to suppose a substantive entity existing beyond the phenomena, of which the word shall be the name.**" (p. 195)
 - A recent commentator (Barrett, 2009) offers a helpful elaboration:
 - "Words are powerful in science....Words can also be dangerous. They present scientists with Faustian bargain. We need words to do the work of science, but words can lead us to mistake observer-dependent categories (or nominal kinds) for observer-independent categories (or natural kinds). By naming both defensive treading and freezing as fear, for example, scientists are lulled into thinking these behaviors share a deep property, and they will spend years searching for it, even when it may not exist." [Barrett, 2009; p. 329; *The Future of Psychology: Connecting Mind to Brain*]
- But James is also concerned about the opposite problem: **Misunderstanding psychological phenomena because we lack the proper word(s).**
 - "We are then prone to suppose that no entity can be there; and so we come to overlook phenomena whose existence would be patent to us all, had we only grown up to hear it familiarly recognized in speech. It is hard to focus our attention on the nameless, and so there results a certain vacuousness in the descriptive parts of most psychologies." (p. 195)
- So, it seems that one of the challenges of scientific psychology is to **ensure the proper alignment of our vocabulary with psychological reality.** This may not be as easy to accomplish as it sounds, as a second source of error in psychology seems to raise serious questions about the possibility that scientific psychology is ever likely to *get its language right*.

2) The psychologist's fallacy (p. 196)

- James account of this source of error begins simply enough:
 - "The *great* snare of the psychologist is **the confusion of his own standpoint with that of the mental fact about which he is making his report.**" (p. 196)
- It seems that everyone can appreciate this insight. Who among us would not admit that scientific psychology offers a point of view quite different from the perspective we adopt as we live out our lives?
 - We might recall here the important distinction (discussed above) between *living* a truth (knowledge of acquaintance) and considering that truth as an object of cognition (knowledge-about).
- Most of us do not *live our lives* as social scientists (even if we adopt the perspective of a social scientist in our scholarly work).

- James observes: "the mental state is aware of itself only from within; it grasps what we call its own content, and nothing more. The psychologist, on the contrary, is aware of it from without, and knows its relations with all sorts of other things" (p. 197).
 - ❖ As such, "we must be very careful...in discussing a state of mind from the psychologist's point of view, to avoid foisting into its own ken matters that are only there for ours" (P. 197)
 - ❖ "Crude as such a confusion of standpoints seems to be when abstractly stated, it is nevertheless a snare into which no psychologist has kept himself at all times from falling, and which forms almost the entire stock-in-trade of certain schools. We cannot be too watchful against its subtly corrupting influence" (p. 197)
- But this seems *all too easy*. The hardened atheist has no difficulty acknowledging that he *lives among believers*. Likewise, the well-trained scientific psychologist hardly needs to be reminded that virtually every one of his participants has a limited understanding of (or concern about) recent advances in scientific psychology. And even if they are well schooled in the social sciences, it is doubtful that they live the majority of their lives *as* social scientists. The mundane matters of everyday life are much more likely to be the focus of their concern.
- It seems to me that cognizance of the Psychologist's Fallacy is all-too-likely to encourage a *patronizing humanism* on the part of the academic psychologist. e.g., "I'm a psychologist who uses the tools of science to make sense of human behavior. But is *perfectly ok* if you don't do this! Feel free to live your life as if science never happened. Just don't pretend that you are in possession of any sort of refined cognition, or that you have been granted access to *objective truth*."
- But it is well to remember that James' discussion of the Psychologist's Fallacy is a warning to *psychologists*, not to the naive laity. So we might ask: **what are psychologists *missing* when they ignore the subjective experience of the ordinary person?**
 - I'd like to share here a thought that occurred to me several years ago as I was teaching Erikson's psychosocial theory in a developmental psychology class:
 - Suppose (for the sake of argument) that (a) I fully understand Erikson's theory (in all its richness and complexity) and (b) the theory is "valid" (in all respects that matter). The theory outlines the conditions that must be met for me to achieve a meaningful sense of wholeness: e.g., I must acquire a constellation of (fused) psychosocial virtues: Hope, Will, Purpose, Competence, Fidelity, Love, Care, and Wisdom (with each successive virtue grounded in the preceding virtues as well as various other psychosocial conditions). *Well said, Erikson*. But notice that a complete *understanding* of this theory does not grant me the *capacity* to achieve the successful resolution of any of the conflicts described by this very theory. Adages notwithstanding, knowledge does not always grant power.
 - By analogy, the military commander with the richest understanding of strategy is not thereby in possession of the *power* to win a war. Material resources must also be taken into account (troops, field position). Tragically,

the well-schooled commander may have a deeper appreciation for *why he's about to lose the war* than virtually any other commander in his place.

[Here, "wiser but sadder" seems to be the appropriate description]

- As I live my story, I encounter *adversity, resistance* and *pain*. Significantly, if I take a few (cognitive) steps back, I no longer *experience* life's challenges -- Rather, I *reflect* upon them. And the grander the theory, the greater my distance (or so it seems).
- So there may well be ulterior motives for adopting a "scientific" mindset. I'm reminded here of Nietzsche's account of science in *The Genealogy of Morals*:
 - "Oh, what does science not conceal today! How much, at any rate, is it *meant* to conceal! The proficiency of our finest scholars, their heedless industry, their heads smoking day and night, their very craftsmanship -- how often the real meaning of all this lies in the desire to keep something hidden from oneself! Science as a means to self-narcosis..." (Third Essay, Section 23)
- David E. Leary (in a short article entitled *The Psychologist's Dilemma: To Subject the Self to Science or Science to the Self?*) offers the following account of the predicament of the scientific psychologist, as he believes it was understood by James:
 - What are we to do?
 - a) "**objectify the self** by submitting it to traditional scientific method of analysis",
or
 - b) "**subjectify science** by submitting its procedures to a psychological analysis" (Leary, 1990, p. 67)
 - According to Leary (1990),
 - "The psychologist's dilemma, experienced intensely by James to varying degrees by other founders of scientific psychology, can be stated rather simply. It is: Whether to create a science *of* the self, *objectively* considered, or a science *compatible with* the self, as *subjectively* experienced" (p. 67).
- The *Psychologist's Fallacy* might thereby be considered as a **fundamental category mistake**. A scientific account of our universe is not *richer, more coherent, or more truthful* than our subjective experience. The two points of view *cannot be compared* on these dimensions, any more than we can compare *lemons* and *social justice* on the dimension of "sourness".
 - This account is supported by Bunn (2010), who considers James as effectively distinguishing *human kinds* and *natural kinds*.
 - "Comparing human kinds with natural kinds is less like comparing apples and oranges than it is akin to comparing apples with unemployment" (Bunn, 2010, p. 966).
- So, when I commit the Psychologist's Fallacy, I am uncritically presuming that my mindset as a scientist has something in common with (or can otherwise be meaningfully compared with) the world of ordinary experience.
 - It seems to me that the Psychologist's Fallacy echoes (and might be considered as a variation of) the so-called Naturalistic Fallacy (the confounding of *is* and *ought*). This idea requires development, but James himself does appear to recognize *value* as consubstantial with consciousness:

- "The conception of consciousness as a purely cognitive form of being...is thoroughly anti-psychological...Every actually existing consciousness seems to itself at any rate to be a **fighter for ends**, of which many, but for its presence, would not be ends at all. Its powers of cognition are mainly subservient to these ends, discerning which facts further them and which do not." (p. 141).
- All that said, it is possible to consider human reality *from the outside*. As James observes:
 - **"When we look at living creatures from an outward point of view, one of the first things that strike us is that they are bundles of habits"** (p. 104).

On Habit

- Laws of nature = Habits
 - "The laws of Nature are nothing but the immutable habits which the different elementary sorts of matter follow in their actions and reactions upon each other" (p. 104).
- As we move to the organic realm, the complexity of habits appears to increase
 - "In the organic world...the habits are more variable....Even instincts vary from one individual to another of a kind; and are modified in the same individual...to suit the exigencies of the case" (p. 104).
- Significantly, the very notion of a habit implies the existence of *something* that can behave in a certain way. But it also implies that this very "something" is sufficiently malleable as to allow for change (behavior). Matter, then, must be **plastic**.
 - "Plasticity...in the wide sense of the word, means the possession of a structure weak enough to yield to an influence, but strong enough not to yield all at once."
 - **"Each relatively stable phase of equilibrium in such a structure is marked by what we may call a new set of habits."** [Consider this statement in relation to Henrique's notion of "dimensions of complexity.]"
 - "Organic matter, especially nervous tissue, seems endowed with a very extraordinary degree of plasticity of this sort; so that we may without hesitation lay down as our first proposition the following, that the phenomena of habit in living beings are due to the plasticity of the organic materials of which their bodies are composed" (p. 105)
- The human nervous system is likewise appropriately considered as a constellation of habits. Here, James quotes with approval a claim made by Carpenter (1874): *our nervous system grows to the modes in which it has been exercised*.
 - This claim has multiple "practical applications":
 1. "The first result of it is that *habit simplifies the movements required to achieve a given result, makes them more accurate and diminishes fatigue*" (p. 112).
 - e.g., playing the piano gets easier with practice.
 2. "The next result is that *habit diminishes the conscious attention with which our acts are performed*" (p. 114).

- "A strictly voluntary act has to be guided by idea, perception, and volition, throughout its whole course" (p. 115)
- In habitual action,
 - "the only impulse which the centres of idea or perception need send down is the initial impulse, the command to *start*" (p. 116)
 - "The upper regions of brain and mind are set comparatively free" (p. 115-116)
- A psychology of habit is rich in **ethical implications**
 - "The great thing...in all education, is to **make our nervous system our ally instead of our enemy**" (p. 122).
 - "...we must make automatic and habitual, as early as possible, as many useful actions as we can, and guard against the growing into ways that are likely to be disadvantageous to us, as we should guard against the plague. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work" (p. 122)
 - Maxims (inspired by Bain's discussion of "moral habits")
 1. **"In the acquisition of a new habit, or the leaving off of an old one, we must take care to launch ourselves with as strong and decided an initiative as possible"** (p. 123)
 - "...put yourself assiduously in conditions that encourage the new way; make engagements incompatible with the old; take a public pledge, if the case allows; in short, envelop your resolution with every aid you know" (p. 123)
 2. **"Never suffer an exception to occur till the new habit is securely rooted in your life"** (p. 123)
 - "Each lapse is like the letting fall of a ball of string which one is carefully winding up; a single slip undoes more than a great many turns will wind again. Continuity of training is the great means of making the nervous system act infallibly right" (p. 123)
 3. **"Seize the very first possible opportunity to act on every resolution you make, and on every emotional prompting you may experience in the direction of the habits you aspire to gain"** (p. 124)
 - **"It is not in the moment of their forming, but in the moment of their producing motor effects, that resolves and aspirations communicate the new 'set' to the brain"** (p. 124)
 - This claim has some rather striking implication. It is well worth quoting James at length here:
 - "No matter how full a reservoir of maxims one may possess, and no matter how good one's sentiments may be, if one have not taken advantage of every

concrete opportunity to act, one's character may remain entirely unaffected for the better."

- "With mere good intentions, hell is proverbially paved."
- **"A tendency to act only becomes effectively ingrained in us in proportion to the uninterrupted frequency with which the actions actually occur, and the brain 'grows' to their use.** Every time a resolve or a fine glow of feeling evaporates without bearing practical fruit is worse than a chance lost; it works so as positively to hinder future resolutions and emotions from taking the normal path of discharge."
- There is no more contemptible type of human character than that of the nerveless sentimentalist and dreamer, who spends his life in a weltering sea of sensibility and emotion, but who never does a manly concrete deed."
- "The habit of excessive novel-reading and theatre-going will produce true monsters in this line. The weeping of a Russian lady over the fictitious personages in the play, while her coach-man is freezing to death on his seat outside, is the sort of thing that everywhere happens on a less glaring scale."
- "Even the habit of excessive indulgence in music, for those who are neither performers themselves nor musically gifted enough to take it in a purely intellectual way, has probably a relaxing effect upon the character. One becomes filled with emotions which habitually pass without prompting to any deed, and so the inertly sentimental condition is kept up."
 - "The remedy would be, never to suffer one's self to have an emotion at a concert, without expressing it afterward in some active way. Let the expression be the least thing in the world -speaking genially to one's aunt, or giving up one's seat in a horse-car, if nothing more heroic offers - but let it not fail to take place" (p. 125)

4. **"Keep the faculty of effort alive in you by a little gratuitous exercise every day"** (p. 126)

- "That is, be systematically ascetic or heroic in little unnecessary points, do every day or two something for no other reason than that you would rather not do it, so that when the hour of dire need draws nigh, it may find you not unnerved and untrained to stand the test."

The Brain and Nervous System

- "The **function of the nervous system** is to bring each part into harmonious co-operation with every other" (p. 12)
 - "If I begin chopping the foot of a tree, its branches are unmoved by my act, and its leaves murmur as peacefully as ever in the wind. If, on the contrary, I do violence to the foot of a fellow-man, the rest of his body instantly responds to the aggression by movements of alarm or defence. The reason of this difference is that the man has a nervous system whilst the tree has none." (p. 12)
- *"The lower centres act from present sensational stimuli alone; the hemispheres act from perceptions and considerations"* (p. 20)
- **Intelligence** = capacity to entertain relatively *remote* possibilities
 - "In all ages the man whose determinations are swayed by reference to the most distant ends has been held to possess the highest intelligence. The tramp who lives from hour to hour; the bohemian whose engagements are from day to day; the bachelor who builds but for a single life; the father who acts for another generation ; the patriot who thinks of a whole community and many generations; and finally, the philosopher and saint whose cares are for humanity and for eternity,-these range themselves in an unbroken hierarchy, wherein each successive grade results from an increased manifestation of the special form of action by which the cerebral centres are distinguished from all below them" (p. 23)
- James suggests that consciousness is "limited to the hemispheres" (p. 65)
 - *"...the cortex is the sole organ of consciousness in man.* If there be any consciousness pertaining to the lower centres, it is a consciousness of which the self knows nothing" (pp. 66-67).
- It seems that the hemispheres come equipped with *pre-installed "apps"* (which, obviously, is not James' own phrasing).
 - "So far from being unorganized at birth, they must have native tendencies to reaction of a determinate sort. These are the tendencies which we know as emotions and instincts" (p. 76)
 - "Both instincts and emotions are reactions upon special sorts of objects of perception; they depend on the hemispheres; and they are in the first instance reflex, that is, they take place the first time the exciting object is met, are accompanied by no forethought or deliberation, and are irresistible. But they are

modifiable to a certain extent by experience, and on later occasions of meeting the exciting object, the instincts especially have less of the blind impulsive character which they had at first." (p. 76)

- "Meanwhile we can say that the multiplicity of emotional and instinctive reactions in man, together with his extensive associative power, permit of extensive recouplings of the original sensory and motor partners" (p. 76)

To be continued...