Dialogues in Philosophy, Mental and Neuro Sciences

HISTORY OF MENTAL CONCEPTS



Introspection and empathy EDWARD BRADFORD TITCHENER

Classical text from: Titchener EB. (1909) Lectures on the experimental psychology of the thought- processes. The MacMillan Company, New York.

Titchener is credited to be the man who coined the term "empathy" as a translation of the German "Einfühlung". With the raise of modern neuroscience empathy has become a key concept, and historical reconstructions give Titchener's contribution a distinct place in the history of the development of our knowledge about empathy. What is implicitly conveyed is that the neurophysiological processes studied nowadays refer to the same entity that was discussed in the philosophical and psychological literature of late Nineteen and early Twentieth Century. This paper shows that what we have instead is the history of a term, not that of a concept (and a fortiori not that of a real phenomenon). In the case of Titchener, he uses the term empathy to refer to at least three differentiable phenomena.

In the first occurrence, in a lecture at the University of Illinois, he denominates empathy the "fact" that when we have a "visual image" of a given character, we contemporarily experience a kinesthetic activation in the corresponding muscles: "Not only do I see gravity and modesty and pride and courtesy and stateliness, but I feel or act them in the mind's muscles".

In a note subsequently added to the same lecture, Titchener calls empathy the logical and aesthetic act of immediately (or very rapidly) grasping the general sense of a visual schema or of a musical composition.

In a third occurrence empathy is used in the interpersonal context of the experimental setting. Here empathy refers to the "full sympathy" of the experimenter with his experimental subject: "he must think [...] as they think, understand as they understand, speak in their language". No further analysis of this phenomenon is given, it is taken for granted. Finally, Titchener returns to empathy and kinesthesis by talking of "motor empathy" (similarly to the above reported first occurrence) in case of "feelings of relation". Here he links together: viewing a lecturer often using in his talk the monosyllable "but", having a picture in mind representing this "feeling of but", and experiencing the corresponding kinesthetic activation, sometimes together with "a strong affective colouring".

Keywords: philosophy of psychology, empathy, imagination, experimental psychology, introspection

DIAL PHIL MENT NEURO SCI 2014; 7(1): 25-30

... the psychological experiment is, in essentials, a controlled introspection

A SCIENCE OF INTROSPECTION^a

(p.3-6) If I chance to be reflecting on the progress of science, there is likely to arise before my mind's eye a scene familiar to my childhood, — the flow of the incoming tide over a broad extent of sandy shore. The whole body of water is pressing forward, irresistibly, as natural law decrees. But its front is not unbroken; for the sand is rock-strewn and uneven, so that here there are eddying pools of unusual depth, and there, again, long fingers of the sea stretched out towards the land. My mind, as I shall presently show in more detail, is prone to imagery; and this image, of check and overflow in the van of a great movement, has come to represent for me the progress of science.

You will take my meaning, even if you do not see my picture. Scientific knowledge is steadily and continuously increasing; but the men who stand for science are likely, at any given time, to be dominated by a few particular interests. Sometimes a brilliant discovery or a daring theory opens up a certain line of investigation; sometimes suggestion seems to spring of itself from the mere accumulation of facts. Striking illustrations, under both of these heads, are furnished by the physics and the biology of the past decade.

Illustrations at least as striking, although less generally known, are furnished by our own growing science of experimental psychology. A few years ago, it seemed that everybody was interested in kinesthetic sensations. Then the geometrical illusions of vision had their day. Then we were all running to the study of memory and association. Then the affective processes came to the forefront of discussion. And all the while the experimental method was doing its appointed work over the whole face of the science. Just now, it might fairly be argued that the centre of interest for the experimental psychologist lies in the field of thought.

Current tendencies are oftentimes difficult to explain, simply because we lack perspective; and I do not find explanation easy in the present case. Yet there must have been, at the beginning of the twentieth century, something in the psychological atmosphere that was peculiarly favourable to thought.

We may point, perhaps, to the gradual and increasing recognition of the value of introspection, with its promise of a wide extension of the experimental method: for if the psychological experiment is, in essentials, a controlled introspection, and if our instruments of precision are but means to that control, the method may evidently be carried into every region of consciousness.

We may think, also, of the publication of Wundt's (1900/1904) great work on language, and of its challenge to the experimentalists.

"Fortunately for the science," Wundt (1904, p.5) writes, "there are sources of objective psychological knowledge, which become accessible at the very point where the experimental method fails us. These are certain products of the common life, in which we may trace the operation of determinate psychical motives: chief among them are language, myth and custom"

Here is a limit set to the applicability of experiment; and to set a bound is directly to challenge a trespass.

We may think, once more, of the stimulus received from workers in neighbouring fields of logic and *Gegenstandstheorie*, from Lipps and Erdmann, from Husserl and Meinong.

We may remember that the human mind is for ever swinging between extremes, and we may suppose that the time had come for a reaction against 'sensationalism'.

Here are motives enough, if we could trace their several influences, — and if we could be sure that they are motives: if, I mean, we could be sure that they are not themselves symptoms of a general movement, which has involved experimental psychology as it has involved the mental sciences at large. However that may be, the fact is there. Binet in France, Marbe and his successors in Germany, Woodworth in the United States, have all sought to bring the processes of thought under the control of the experimental method. And all alike have reached the conclusion, each independently for himself, that the experience of thought is not adequately described in the orthodox textbooks of psychology.

It is of these men, of their views and their work, that I am to speak in the lectures now begun. I shall report, as impartially as I may, their results and their interpretations; and I shall then outline my own understanding of the whole matter. But we cannot come, all in a moment, to close quarters with the experiments. There are certain prior questions that must be asked and answered; and I devote this and the following Lecture to their discussion.

EMPATHY AND IMAGERY

(p.6-10) First of all, there is the question of individual differences, differences of mental constitution.

The creation of a scientific psychology of these differences is, in my opinion, one of the principal achievements of the experimental method; and I believe that a frank acceptance of the teachings of differential psychology will go far to allay some of the perennial controversies of the text-books.

At all events, I do not see how one can fairly approach the psychology of thought, whether as critic or as expositor, without taking account of the machinery of thought in one's own case.

I said just now that I should try to be impartial; and I can offer no better guarantee of good faith than to confess my constitutional bias. I propose, therefore, to turn out my mind for your inspection. I can give you nothing systematic, nothing that has been verified by experiment; but the account will be correct, so far as it goes, and will suffice for our present purpose.

My mind, then, is of the imaginal sort, — I wish that we had a better adjective! — and my

ideational type is of the sort described in the psychologies as mixed. I have always had, and I have always used, a wide range and a great variety of imagery; and my furniture of images is, perhaps, in better than average condition [...]. When I am working for myself, reading or writing or thinking, I experience a complex interlacing of imagery which it is difficult to describe, or at any rate to describe with the just emphasis. My natural tendency is to employ internal speech; and there are occasions when my voice rings out clearly to the mental ear and my throat feels stiff as if with much talking. But in general the internal speech is reduced to a faint flicker of articulatory movement. This may be due, in part, to the fact that I am a very rapid reader, and have tried to acquire the power of purely visual reading. But it is also due, I am sure, to the fact that I have vivid and persistent auditory imagery. If I may venture on a very sweeping statement, I should say that I never sit down to read a book, or to write a paragraph, or to think out a problem, without a musical accompaniment. Usually the accompaniment is orchestral, with a preponderance of the wood-wind, — I have a sort of personal affection for the oboe; sometimes it is in the tonecolour of piano or violin; never, I think, is it vocal. Usually, again, it is the reproduction of a known composition; on rare occasions it is wholly unfamiliar. I am not aware that I make any use of this musical imagery, though I should be sorry to lose it, and I can offer no explanation of its arousal^b. However, the important point in the present connection is, simply, that its freakish appearance has, without doubt, tended to repress the auditory factor in internal speech. These musical and verbal images crop up of their own accord.

(p.13-14) Whenever I read or hear that somebody has done something modestly, or gravely, or proudly, or humbly, or courteously, I see a visual hint of the modesty or gravity or pride or humility or courtesy. The stately heroine gives me a flash of a tall figure, the only clear part of which is a hand holding up a steely grey skirt; the humble suitor gives me a flash of a bent figure, the only clear part of which is the bowed back, though at times there are hands held deprecatingly before the absent face. A great many of these sketches are irrelevant and accessory; but they often are, and they always may be, the vehicles of a logical meaning. The stately form that steps through the French window to the lawn may be clothed in all the colours of the rainbow; but its stateliness is the hand on the grey skirt. I shall not multiply instances. All this description must be either self-evident or as unreal as a fairy-tale.

(p.20-22) As recently as 1904 I was not sure whether or not I possessed free kinesthetic images. I could not decide whether my kinesthetic memories were imaginal, or whether they involved an actual reinstatement, in weaker form, of the original sensations. I had no criterion by which to distinguish the sensation from the image.

However, as so often happens, I had hardly recorded my difficulty when the criterion was found: a ground of distinction so simple, that one wonders why there should have been any difficulty at all. It may be roughly phrased in the statement that actual movement always brings into play more muscles than are necessary, while ideal movement is confined to the precise group of muscles concerned. You will notice the difference at once — provided that you have kinesthetic images — if you compare an actual nod of the head with the mental nod that signifies assent to an argument, or the actual frown and wrinkling of the forehead with the mental frown that signifies perplexity. The sensed nod and frown are coarse and rough in outline; the imaged nod and frown are cleanly and delicately traced. I do not say, of course, that this is the sole difference between the two modes of experience. On the contrary, now that it has become clear, I seem to find that the kinesthetic image and the kinesthetic sensation differ in all essential respects precisely as visual image differs from visual sensation. But I think it is a dependable difference, and one that offers a good starting point for further analysis.

We shall recur to this kinesthetic imagery in a later Lecture. All that I have to remark now is that the various visual images, which I have referred to as possible vehicles of logical meaning, oftentimes share their task with kinesthesis. Not only do I see gravity and modesty and pride and courtesy and stateliness, but I feel or act them in the mind's muscles. This is, I suppose, a simple case of empathy, if we may coin that term as a rendering of Einfühlung; there is nothing curious or idiosyncratic about it; but it is a fact that must be mentioned. And further: just as the visual image may mean of itself, without kinesthetic accompaniment, so may the kinesthetic image occur and mean of itself, without assistance from vision. I represent the meaning of affirmation, for instance, by the image of a little nick felt at the back of the neck, — an experience which, in sensation, is complicated by pressures and pulls from the scalp and throat.

(p.180-182) What, then, of the imageless thoughts, the awarenesses, the *Bewusstseinslagen* of meaning and the rest? I have, as you may suppose, been keeping my eyes open for their appearance; and we have several investigations now in progress that aim, more or less directly, at their examination.

What I have personally found does not, so far, shake my faith in sensationalism. I have become keenly alive, for instance, to the variety of organic attitude and its kinesthetic representation. I am sure that when I sit down to the typewriter to think out a lecture, and again to work off the daily batch of professional correspondence, and again to write an intimate and characteristic letter to a near friend, — I am sure that in these three cases I sit down differently.

The different Aufgaben come to consciousness, in part, as different feels of the whole body; I am somehow a different organism, and a consciously different organism. Description in the rough is not difficult: there are different visceral pressures, different distributions of tonicity in the muscles of back and legs, differences in the sensed play of facial expression, differences in the movements of arms and hands in the intervals between striking the keys, rather obvious differences in respiration, and marked differences of local or general involuntary movement. It is clear that these differences, or many of them, could be recorded by the instruments which we employ for the method of expression, and could thus be made a matter of objective record. But I

have, at any rate, no doubt of their subjective reality; and I believe that, under experimental conditions, description would be possible in detail. I find, moreover, that these attitudinal feels are touched off in all sorts of ways: by an author's choice and arrangement of words, by the intonation of a speaking voice, by the nature of my physical and social environment at large. They shade off gradually into those empathic experiences which I mentioned in the first Lecture, the experiences in which I not only see gravity and modesty and pride and courtesy and stateliness in the mind's eye, but also feel or act them in the mind's muscles. And I should add that they may be of all degrees of definiteness, from the relatively coarse and heavy outlines of the typewriting illustration, down to the merest flicker of imagery which lies, I suppose, on the border of an unconscious disposition.

INTERPERSONAL EMPATHY

(p.90-92) We come now to the Ausfragemethode proper, to that method of examination which Wundt condemns as a mere travesty of the experimental procedure. In 1907 Bühler published the first installment of his *Psychology* of the Thought- Processes: Facts and Problems, — the article *Ueber Gedanken*, On Thoughts. His problem is very general: What do we experience when we are thinking? To solve it, he says, the prime necessity is, to make your observers think. And to make them think, he reads to them some aphorism of Nietzsche, some couplet from Rückert, or puts some question suited to their temper and attainments. The question is always answerable by Yes or No: Was the Pythagorean proposition known in the Middle Ages? Can our thought apprehend the nature of thought? Does Monism really involve the negation of personality? The aphorisms are thrown into questionform by a preliminary: Do you understand?

can be no doubt that the method of 'systematic experimental introspection', whatever its advantages, runs to bulk. If it comes into general use, and still more if, as Ach proposes, the conversations between experimenter and observer, the introspective interviews, are taken down by the phonograph and stored for future reference, we shall be forced to employ a staff of 'introspective computers' to render our materials manageable.

Do you agree with this? — For example: Is this true? 'To give every man his own were to will justice and to achieve chaos'; Do you grasp this? 'Thinking is so extraordinarily difficult that many a man had rather pass judgment'. The harmless necessary stop-watch is started as the stimulus begins, and arrested as the observer replies by Yes or No. When the answer has been given, the observer undertakes a description, as accurate as possible, of his experience during the experimental period. Bühler, like his predecessors, lays great stress upon the attitude of the experimenter and the introspective calibre of the observer. The experimenter must be in full sympathy with his observers; he must think, by empathy, as they think, understand as they understand, speak in their language. And the observers themselves must be picked men, sujets d'élection: Bühler had seven at his disposal, but relies exclusively upon the reports of the two most experienced, Külpe and Dürr,— I give a single instance of question and report.

Can our thought apprehend the nature of thought? — Observer K. 'Yes.' 6 sec.—The question struck me comically at first; I thought it must be a trick question. Then Hegel's objection to Kant suddenly occurred to me, and then I said, decidedly: Yes. The thought of Hegel's objection was fairly full; I knew at the moment precisely what the whole thing was about; there were no words in it, though, and there were no ideas either. Only the word 'Hegel' came up afterwards, in auditory-motor form.

FEELINGS OF RELATION

(p.184-188) And what of the feelings of relation? Do I not grant that they exist? Most assuredly; I intimated as much in a previous Lecture. It would be curious indeed if we could talk so fluently about relations, and yet had no feeling of them, no conscious representation of relation. But the phrase 'feeling of relation' is no more unequivocal, as a psychological term, than the phrase 'idea of object' or 'consciousness of meaning'. It carries an intimation, an indication, a statement-about; it does not describe. And the question for psychology is precisely that: What do we experience when we have a 'feeling of relation'?

What I myself experience depends upon circumstances. It was my pleasure and duty, a little

while ago, to sit on the platform behind a somewhat emphatic lecturer, who made great use of the monosyllable 'but.' My 'feeling of but' has contained, ever since, a flashing picture of a bald crown, with a fringe of hair below, and a massive black shoulder, the whole passing swiftly down the visual field from northwest to southeast. I pick up such pictures very easily, in all departments of mind; and, as I have told you, they may come to stand alone in consciousness as vehicles of meaning. In this particular instance, the picture is combined with an empathic attitude; and all such 'feelings' — feelings of if, and why, and nevertheless, and therefore — normally take the form, in my experience, of motor empathy. I act the feeling out, though as a rule in imaginal and not in sensational terms. It may be fleeting, or it may be relatively stable; whatever it is, I have not the slightest doubt of its kinesthetic character. Sometimes it has a strong affective colouring — this statement holds of all my attitudinal feels — and sometimes it is wholly indifferent.

The kinesthetic origin of these 'feelings' has recently been urged by, who however considers them to be, in the human consciousness, "ultimately and absolutely unanalysable and unlocalisable."

"The significance of these ['relational elements']," we read, "... is the following. They are remnants of remotely ancestral motor attitudes, and they resist analysis now because of their vestigial nature. Take the 'feeling of but', for example: the sense of the contradiction between two ideas, present when we say 'I should like to do so and so, but — here is an objection.'

If we trace this back, what can it have been originally but the experience of primitive organisms called upon by simultaneous stimuli to make two incompatible reactions at once, and what can that experience have been but a Washburn certain suspended, baffled motor attitude? Similarly with the 'feeling of if ...'" (Washburn, 1906, p.63)

We all appeal, at times, to the primitive organism — who is a useful creature — and I have no doubt that, in this particular case, the appeal is justified. But, in my own experience, an organism need not be more primitive than a professor of psychology in an American university to feel the suspended motor attitude. And while the analysis and localisation of my particular feeling of 'but' has value only for individual psychol-

ogy, I do roughly localise it and I can roughly analyse it into constituents.

It follows from what has been said that I fully agree with Woodworth as regards the unit-character, the psychological completeness and independence, of the 'feeling of relation'; Calkins' (1901) characteristic of 'belonging to' something else appears to me to derive from reflection, not from introspection. Where I differ is in my sensationalistic reading of the relational consciousness.

It is, however, always possible, as I explained a little while ago in the case of meaning, that we are in presence of individual differences, and that the champions of the element of relation have moved farther than I along the path to automatism or mechanisation. It would then again be a question of expediency whether we set this unanalysable degenerate in a class by itself, or

REFERENCES

Bühler K. (1907) Tatsachen und Probleme zu einer Psychologie der Denkvorgänge. Über Gedanken. Arch Gesamte Psychol, 9:297-365.

Calkins MW. (1901) An introduction to psychology. The MacMillan Company, London.

Wundt W. (1900/1904) Völkerpsychologie: eine Untersuchung der Entwicklungsgesetze von Sprache, Mythus und Sitte. Verlag von Wilhelm Engelmann, Leipzig.

Washburn MF. (1906) The term 'feeling'. Journ Philos Psych Sci Meth, 3:62-63.

Wundt W. (1904) Principles of physiological psychology. The MacMillan Company, New York.

whether we give it a place among the ideational contents of consciousness. In either event we shall have to qualify our choice, to state that another mode of classification is possible.

That the path of habit does, in fact, lead here to mechanisation, I am as sure as, without strict experimental proof, I can be. Over and over again I have noticed how consciousness may be switched into a new direction by a relational word, without any traceable representation of the relation within consciousness. The function of the word is like that of the mysterious button at the side of the barrel-organ, which when pressed by the grinder changes the resulting tune. I must declare, at the risk of wearying you with declarations, that I can bear witness both to kinaesthesis and to cortical set, but that between these extremes I find nothing at all.

Endnotes

a: Both the arrangement in paragraphs and their titles are not original.

b: (p.205) I have practically no gift of musical composition, and my skill as a performer is below zero. On the other hand, I come of a musical family, and was fortunate enough to hear a great deal of the best piano music in my childhood. My musical endowment — apart from this haunting by orchestral performances — consists in a quick and comprehensive understanding of a composition, a sort of logical and aesthetic *Einfülhlung*, an immediate (or very rapid) grasp of the sense and fitness of the musical structure. There is thus a fairly close analogy between my apprehension of music and the visual schematising of arguments which is described in the Lecture. It would be interesting to know whether the correlation is at all general.