



William James

Psychology: Briefer Course
The Will to Believe
Talks to Teachers and to Students
Essays

WILLIAM JAMES

WRITINGS 1878-1899

Psychology: Briefer Course

*The Will to Believe
and Other Essays in Popular Philosophy*

*Talks to Teachers on Psychology
and to Students on Some of Life's Ideals*

Selected Essays

جامعة بومرداس

كلية الآداب و اللغات

مكتبة الكلية

1838

رقم الجرد

1069/01

جامعة بومرداس

كلية الآداب و اللغات

مكتبة الكلية

الشفرة 101 9:159 9

084x

107



THE LIBRARY OF AMERICA

Contents

CHAPTER I

INTRODUCTORY	II
<i>Psychology defined; psychology as a natural science, its data.</i>	
<i>The human mind and its environment. The postulate that</i>	
<i>all consciousness has cerebral activity for its condition.</i>	

CHAPTER II

SENSATION IN GENERAL.	18
<i>Incoming nerve-currents. Terminal organs. 'Specific ener-</i>	
<i>gies.' Sensations cognize qualities. Knowledge of acquaint-</i>	
<i>ance and knowledge-about. Objects of sensation appear in</i>	
<i>space. The intensity of sensations. Weber's law. Fechner's</i>	
<i>law. Sensations are not psychic compounds. The 'law of rela-</i>	
<i>tivity.' Effects of contrast.</i>	

CHAPTER III

SIGHT	35
<i>The eye. Accommodation. Convergence, binocular vision.</i>	
<i>Double images. Distance. Size, color. After-images. Intensity</i>	
<i>of luminous objects.</i>	

CHAPTER IV

HEARING	54
<i>The ear. The qualities of sound. Pitch. 'Timbre.' Analysis of</i>	
<i>compound air-waves. No fusion of elementary sensations of</i>	
<i>sound. Harmony and discord. Discrimination by the ear.</i>	

CHAPTER V

TOUCH, THE TEMPERATURE SENSE, THE MUSCULAR SENSE, AND PAIN	67
<i>End-organs in the skin. Touch, sense of pressure. Localiza-</i>	
<i>tion. Sensibility to temperature. The muscular sense. Pain.</i>	

CHAPTER VI

SENSATIONS OF MOTION	77
<i>The feeling of motion over surfaces. Feelings in joints. The sense of translation, the sensibility of the semicircular canals.</i>	

CHAPTER VII

THE STRUCTURE OF THE BRAIN.	84
<i>Embryological sketch. Practical dissection of the sheep's brain.</i>	

CHAPTER VIII

THE FUNCTIONS OF THE BRAIN.	98
<i>General idea of nervous function. The frog's nerve-centres. The pigeon's nerve-centres. What the hemispheres do. The automaton-theory. The localization of functions. Brain and mind have analogous 'elements,' sensory and motor. The motor zone. Aphasia. The visual region. Mental blindness. The auditory region, mental deafness. Other centres.</i>	

CHAPTER IX

SOME GENERAL CONDITIONS OF NEURAL ACTIVITY.	124
<i>The nervous discharge. Reaction-time. Simple reactions. Complicated reactions. The summation of stimuli. Cerebral blood-supply. Brain-thermometry. Phosphorus and thought.</i>	

CHAPTER X

HABIT.	137
<i>Its importance, and its physical basis. Due to pathways formed in the centres. Its practical uses. Concatenated acts. Necessity for guiding sensations in secondarily automatic performances. Pedagogical maxims concerning the formation of habits.</i>	

CHAPTER XI

THE STREAM OF CONSCIOUSNESS	152
<i>Analytic order of our study. Every state of mind forms part of a personal consciousness. The same state of mind is never had twice. Permanently recurring ideas are a fiction. Every personal consciousness is continuous. Substantive and transitive states. Every object appears with a 'fringe' of relations. The 'topic' of the thought. Thought may be</i>	

normal in any sort of imagery. Consciousness is always especially interested in some one part of its object.

CHAPTER XII

THE SELF	174
--------------------	-----

The Me and the I. The material Me. The social Me. The spiritual Me. Self-appreciation. Self-seeking, bodily, social, and spiritual. Rivalry of the Mes. Their hierarchy. Teleology of self-interest. The I, or 'pure ego.' Thoughts are not compounded of 'fused' sensations. The 'soul' as a combining medium. The sense of personal identity. Explained by identity of function in successive passing thoughts. Mutations of the self. Insane delusions. Alternating personalities. Mediumships or possessions. Who is the Thinker.

CHAPTER XIII

ATTENTION	210
---------------------	-----

The narrowness of the field of consciousness. Dispersed attention. To how much can we attend at once? The varieties of attention. Voluntary attention, its momentary character. To keep our attention, an object must change. Genius and attention. Attention's physiological conditions. The sense-organ must be adapted. The idea of the object must be aroused. Pedagogic remarks. Attention and free-will.

CHAPTER XIV

CONCEPTION	229
----------------------	-----

Different states of mind can mean the same. Conceptions of abstract, of universal, and of problematic objects. The thought of 'the same' is not the same thought over again.

CHAPTER XV

DISCRIMINATION	234
--------------------------	-----

Discrimination and association; definition of discrimination. Conditions which favor it. The sensation of difference. Differences inferred. The analysis of compound objects. To be easily singled out, a quality should already be separately known. Dissociation by varying concomitants. Practice improves discrimination.

CHAPTER XVI

ASSOCIATION	242
-----------------------	-----

The order of our ideas. It is determined by cerebral laws. The ultimate cause of association is habit. The elementary law in association. Indeterminateness of its results. Total recall. Partial recall, and the law of interest. Frequency, recency, vividness, and emotional congruity tend to determine the object recalled. Focalized recall, or 'association by similarity.' Voluntary trains of thought. The solution of problems. Similarity no elementary law; summary and conclusion.

CHAPTER XVII

THE SENSE OF TIME	266
-----------------------------	-----

The sensible present has duration. We have no sense for absolutely empty time. We measure duration by the events which succeed in it. The feeling of past time is a present feeling. Due to a constant cerebral condition.

CHAPTER XVIII

MEMORY	272
------------------	-----

What it is. It involves both retention and recall. Both elements explained by paths formed by habit in the brain. Two conditions of a good memory, persistence and numerousness of paths. Cramming. One's native retentiveness is unchangeable. Improvement of the memory. Recognition. Forgetting. Pathological conditions.

CHAPTER XIX

IMAGINATION	286
-----------------------	-----

What it is. Imaginations differ from man to man; Galton's statistics of visual imagery. Images of sounds. Images of movement. Images of touch. Loss of images in aphasia. The neural process in imagination.

CHAPTER XX

PERCEPTION	295
----------------------	-----

Perception and sensation compared. The perceptive state of mind is not a compound. Perception is of definite things. Illusions. First type: inference of the more usual object.

Second type: inference of the object of which our mind is full. Apperception. Genius and old-fogyism. The physiological process in perception. Hallucinations.

CHAPTER XXI

THE PERCEPTION OF SPACE 316

The attribute of extensity belongs to all objects of sensation. The construction of real space. The processes which it involves: 1) Subdivision; 2) Coalescence of different sensible data into one 'thing'; 3) Location in an environment; 4) Place in a series of positions; 5) Measurement. Objects which are signs, and objects which are realities. The 'third dimension.' Berkeley's theory of distance. The part played by the intellect in space-perception.

CHAPTER XXII

REASONING. 330

What it is. It involves the use of abstract characters. What is meant by an 'essential' character. The 'essence' varies with the subjective interest. The two great points in reasoning, 'sagacity' and 'wisdom.' Sagacity. The help given by association by similarity. The reasoning powers of brutes.

CHAPTER XXIII

CONSCIOUSNESS AND MOVEMENT 347

All consciousness is motor. Three classes of movement to which it leads.

CHAPTER XXIV

EMOTION 350

Emotions compared with instincts. The varieties of emotion are innumerable. The cause of their varieties. The feeling, in the coarser emotions, results from the bodily expression. This view must not be called materialistic. This view explains the great variability of emotion. A corollary verified. An objection replied to. The subtler emotions. Description of fear. Genesis of the emotional reactions.

CHAPTER XXV

INSTINCT.	366
-------------------	-----

Its definition. Every instinct is an impulse. Instincts are not always blind or invariable. Two principles of non-uniformity. Enumeration of instincts in man. Description of fear.

CHAPTER XXVI

WILL	387
----------------	-----

Voluntary acts. They are secondary performances. No third kind of idea is called for. The motor-cue. Ideo-motor action. Action after deliberation. Five chief types of decision. The feeling of effort. Healthiness of will. Unhealthiness of will. The explosive will: 1) from defective inhibition; 2) from exaggerated impulsion. The obstructed will. Effort feels like an original force. Pleasure and pain as springs of action. What holds attention determines action. Will is a relation between the mind and its 'ideas.' Volitional effort is effort of attention. The question of free-will. Ethical importance of the phenomenon of effort.

EPILOGUE

PSYCHOLOGY AND PHILOSOPHY.	427
------------------------------------	-----

What the word metaphysics means. Relation of consciousness to the brain. The relation of states of mind to their 'objects.' The changing character of consciousness. States of consciousness themselves are not verifiable facts.

INDEX	435
-----------------	-----