

Philosophy of the Human Person

Lecture #27

Adler on Intellect

Darwin & Adler

Darwin

fundamental distinction—instinct vs. intelligence
among animals showing intelligence—only differences of degree

Adler

distinction within intelligence—sense vs. intellect
sense—including perception, memory, imagination
intellect—including conception, judgment, & reasoning
a difference in kind

distinction between mental & physical

cf. Brentano's argument that mental states are not mere arrangements of material parts

but here, a suggestion that even the matter-form composition that Aristotelians can use to account for mental states is insufficient to account for intellect

two questions

1. is intellect really qualitatively different from sense?
2. can a material being (incl. ordinary matter-form composite) have an intellect?

I. Methodology

preliminaries

in discussion of the mental—five objects of thought

the mind itself

its powers

habits

acts

products (or contents)

how can we find out about these things?

two possibilities—observation and inference

science uses both

sense observation as the usual foundation

inference to existence of dinosaurs, forces, atoms, quarks
none can be observed by sense observation
so, either there is some other kind of observation
or, they all must be inferred from something we can observe
namely, behavior

three views to be distinguished

introspectionist psychology

introspective awareness of both mental acts & the contents of the mind

cf. Descartes' claim that he can doubt the existence of the external world,
but at least he knows the contents of his own mind

J. B. Watson's behaviorism

methodological behaviorism

complete rejection of introspection

science must limit itself to perceivable phenomena

though they do seem willing to infer features of the nervous system

hence, its foundation in reflexes (stimulus-response sets)

conditioning and compounding of these

cf. his *definitions* of emotions¹

fear — “a sudden catching of the breath, cluching randomly with the hands, ... sudden closing of the eyelids, puckering of the lips, then crying.”

rage — a reaction in which “the body stiffens and fairly well-coordinated slashing or striking movements of the hands and arms result; the feet and legs are drawn up and down; the breath is held until the child's face is flushed.”

love — a reaction in which “a smile may appear, attempts at gurgling and cooing, and finally, in older children, the extension of the arms.”

metaphysical materialism—only material things exist

so, perhaps, minds are just brains

Adler

contra Watson

introspection reveals mental acts

cf. our reflexive awareness of whether we are thinking, &c.

our ability to distinguish imagination from memory on this basis

introspection reveals some of the content of the mind

e.g., bodily feelings & emotions (“affective processes”)

the objects of private experience

contra introspectionism

¹ *Psychology from a Behaviorist Standpoint*, pp. 200-1.

introspection does not reveal all the contents of the mind

distinction of cognitive from affective processes

affective processes (e.g., emotions, sensations) make us aware of something about us (e.g., how we feel)

cognitive processes (e.g., perception, thought) make us aware of something else (e.g., what we see)

introspection does not reveal the existence of the mind itself, nor its powers or habits

all of these must be inferred

products of cognitive processes from

the powers from the acts that they make possible

e.g., from the act of choice, the power of will

from the act of thought, the power of reason

the habits from the diversity of acts of a given power

the power of choice makes possible acts of generosity and selfishness

from this, we can infer the existence of virtues (good habits) and vices (bad habits)

the mind itself from the existence of the powers

2. The Distinction between Intellect and Sense

elaboration on kinds of differences

two kinds of difference in kind

superficial difference in kind

a difference in kind caused by a difference in degree

e.g., solids and liquids differ in kind because there is a difference in the speed of their component molecules (a difference in degree)

radical difference in kind

a difference in kind not caused by a difference in degree

e.g., the difference between a number and a geometric figure
(four and a square)

or between a substance and an attribute

(green and a snake)

are there any radical differences in kind in the physical world?

similarities between the human and animal minds

sense-perception

memory & imagination

emotions

distinctive features of the human mind

conceptual thought

in contrast to perceptual thought

difference on the basis of their objects

perception of individuals

extensible to memory of image

comparison of images

seeing something as desirable or to be avoided

conception of universals

ability to recognize perceived objects as being of a certain kind (e.g.,
to recognize Lassie *as a dog*)

& to understand kind-terms (e.g., to know what dogs are)

(NB: this allows apprehension of

non-perceived things—e.g., the core of the earth

& even imperceptible things—e.g., angels & God)

intellectual appetite (will, the ability to make choices)

in contrast to sense appetite (emotions, motivating desires)

will (rational appetite)

ability to see as good things that do not appeal to the senses

ability to focus on good or bad aspects of things

the foundation of freedom of choice
emotion
ability to be attracted to or repelled by things
the argument that the difference between conceptual thought and perceptual
thought is a difference in kind (an argument from Descartes)
an experiment
two definitions
chiliagon—a thousand-sided object
myriagon—a million-sided object
we can clearly distinguish these conceptually
we cannot conjure up a distinct image of either
so, conceptual thought is distinct from perceptual thought
the argument that man has conceptual thought
from my actions (known by introspection)
to my power (inferred, and inferred to be different from perceptual thought, as
above)
to the human power
by generalization from me to all human beings
or by argument to the best explanation from their actions (known by
observation)
what actions?
language usage
reference to imperceptibles (they could not know those by image)
syntactic complexity

3. The Argument that only Man has Conceptual Thought

that man has conceptual thought

products

making tools for remote use and by means of machine tools provides evidence of conceptual thought

variability in human tools provides evidence of free choice

society

political organization provides evidence of conceptual thought

voluntary associations provides evidence of free choice

thought

thought itself—the fact that we can distinguish chiliagons from myriagons

language

words for imperceptibles (learnable only by description)

syncategorematic words

words that don't fit into the Aristotelian "categories"

substance—e.g., man, dog, tree, crystal

quantity—e.g., large, small

quality—e.g., green, hot

relation—e.g., taller than, to the right of

words like *if, or, not, all, some*

that other animals do not

the case for animal intellect depends on showing animal behavior that requires one to posit an intellect

(Morgan's canon again)

two candidates

animal communication (in particular laboratory attempts to teach animals language)

animal problem solving

can animals use language?

examples of animal communication in nature

warning calls

bee communication

what is language?

Hockett's account of the distinctive features of human language²

vocal auditory channel		shared by many mammals & birds
broadcast transmission & directional reception		
rapid fading		
interchangeability	a speaker can reproduce any message he can understand	
total feedback	a speaker can hear everything he says	
specialization	soundwaves of speech serve only as signals	peculiar to primates (monkeys, apes & man)
semanticity		
arbitrariness		
discreteness		peculiar to hominoids (apes & man)
traditional transmission		
displacement	the ability to evoke things remote in space & time	unique to man
productivity	the ability to say things that have never been said before & still be understood	
duality of patterning	meaningful units (morphemes) composed of meaningless units (phonemes)	

what human language has that natural animal communication lacks
three features

displacement—ability to refer to things that are not present

traditional transmission—language is learned by each generation from the previous generation

double articulation—a linguistic utterance can be broken up into minimum meaningful units (morphemes) which in turn can be broken up into minimal sound units (phonemes)

which features are of interest?

the traditional claim about human distinctiveness has always focussed on intellect; so, which would be signs of intellect?

² Cf. C. F. Hockett, "The Origin of Speech", *Scientific American* 203 (September, 1960): 88-96.

perhaps none; perhaps the list doesn't capture all there is to say
 about language³

Adler's account of the distinctive features of human language
 the issue—distinguishing conceptual & perceptual thought
 perceptual thought—power to ...
 respond to perceived objects
 remember & imagine perceptible objects
 respond similarly to similar perceptibles
 conceptual thought ...
 respond to imperceptibles
 this is similar to displacement's contrast between what is
 actually perceived and what is not
 but different because here the contrast is not what isn't actually
 perceived but was once or at least could be
 rather the contrast is between what could be actually perceived
 and what could not
 make relations among perceptibles & imperceptibles
 cf. double patterning
 but the key here is not just that speech can be broken up into
 words, but that the word order is key to meaning, and in
 very complex ways

the relevant features of language
 terms for both perceptibles & imperceptibles
 grounded in two ways of learning names
 by ostension—being shown the object named by the word
 by description—being told what the word means
 (NB: definition by description necessary for imperceptibles, but
 not sufficient for them)

syntactic complexity
 this requires categorematic & syncategorematic terms
 categorematic—nouns, verbs, adjectives
 syncategorematic—words such as “if”

animals & language in the laboratory
 two basic kinds of mammals
 primates—chimpanzees, gorillas, orangutans
 sea mammals—dolphins, sea lions, otters
 four basic kinds of attempts for primates

³ See W H Thorpe, "The comparison of vocal communication in primates & in man" in R A Hinde, ed., *Non-verbal Communication* (Harvard, 1972), pp. 27-47 for an extended list.

speech—this does not work for physiological reasons

sign language—simplified American Sign Language

chimpanzees—Washoe [the Gardners]

gorilla—Koko [Patterson]

orangutan—Chantek [Miles]

chips on a board—Sarah [Premack]

lexigrams (“typing” on a symbol board) [Savage-Rumbaugh]

Lana, Sherman, Austin

Kanzi

major studies (other than actual speech) begin about 1966

an argument for a difference between man & ape

(1) anything that cannot learn words by definition or description lacks the power of conceptual thought

N.B.: Adler adds a second difference:

(i) anything that cannot learn syncategorematic words cannot use syntactic speech

to keep the argument simple, I have omitted this additional point

(2) apes cannot learn words by definition or description

the argument for this

(i) they don't do this

(ii) the best explanation of this is that they cannot do so

an alternative explanation might be that they have not been placed in situations where there is a real need for them to do so

experimental work would have to be done to test this, but none of the work that has been done gives reason to think this is the problem

so, (3) apes lack the power of conceptual thought

(4) man has conceptual thought

so, (5) man & ape differ in having & lacking conceptual thought

(6) this is a difference in kind, not in degree

so, (7) man & ape differ in kind

and similarly for any other kind of animal