Sperry, R.W. White House Oberlin, Ohio

Jame M. 90
Woodworth
Wood
Pillsbury
Bichard

Actors

Dec 11 '30 Chap I

Smith & Gallorie

Hunter

Kanter camp

Carlyle Characteristics

Leges of the Nine, Analogous with our own laws.

Dexter Reasoner Tennyson

H-B
Bec. & Current

Must prepare before for future

questions in J

\text{for pos.}

\text{had 3 spots in \( D \) + }

\text{199-227 + quicken emotion}

\text{62-63}

\text{147-153 399 456-475}

\text{Processing 19, 10, 15}
PSYCHOLOGY
(Red A's notes + Human + Conscious)

Def: Behavior = Individual sense organ

Learning = a physiological change - but can't explain the

We can explain input

James 'brainpath' and the 'condition reflex'

Spiders don't learn like human beings, not rebuilt

'Mind' mind brain + brain runs body

controlled and directed animal

fearful, set in motion by neuromuscular disturbance

choice of two channels of activity

Evidently we do talk about 'mind,' but damned if I know what it is!

Something other than physiology, the mind contributes these little starts complements the body

All limbs, the theory falls down. Either we make the

physical in thinking

mind physiological or something outside the body must

Analogy of timer in water, governor site with the

mind and (body or brain)

One says that the organism runs itself, (control: choice)

Intelligence is not built-in as a separate part but one is
Motivation = mass of stimuli, usually stimuli are continuous
never use the word motivate a person - to habit him. Of explaining cold-blooded animals no example of motivation from cold.
A → C → E.
A change in behavior of animal due to stimuli of senses.
External: stimuli of gravity, light, tactile, sound, smell.
Internal: changing muscle pressure.
Dashiell creates motivation.

Mind is only description of kind of behavior.

Savage being a machine is extraordinary thing.

This cycle of being a required brain is the

Intercellular - rebuilding of stimulation.

Repetitive manner behavior is constant storage of organization.

Early formation, early habits, roll all 40's and develop of.

A process of building up reactions of reaching.

Daccommodation reaching eye-hand grasp.

The child doesn't want, except perhaps to want food.
One has to learn to want their experience.

Eye-hand reaction = eye follows a light (contrast) = a reflex.

(fatigue from bright lights caused by tendency of eye muscles
to strain toward that light)

The muscles of arm respond to all kinds of stimuli, threatening in front of him, until the hand affects the object stimuli of eyes, and from this he builds up a connection with hand & eye = a conditioned reflex.
The Posture reaction
- effort to hold up head, a native reaction

Locomotion, many combinations (habits, etc.) grow up

Grasping

Head reaction: light → max. stimulus
- flexion of arms + hands
- hands move with eyes to object
- hands + flexion = grasping

Posture - nat. reaction, head holding up → max. stimulus

Unlike eye, posture is at rest in lack of stimulation. Thus a tendency of posture toward minimum movement.

Development: Inferior direction

Learning to move head in direction of object (with eye).

Loom eye, head, shoulders, etc. move to object.

A movement to elongate his reaching possibilities.

Reaches forward, falls, creeps—hurray!

A child wants object when he gets used to responding to its stimuli.

Wanted

An extreme stimulus produces tension. You learn to want that which will produce relaxation, only after you have experienced that which is...
Extensive strain leads to habit formation and relaxation.

Posture - creeping

Standing, sitting, falling, support on hands, accidental parts weight on legs, and reflex works to make other hand grip the reflexes develop into learned habits, all along line.

Left-handed habits should be taught to left-handed. Processes develop on base of underlying tension.

The conditioned reflex. Bechterew + Pavlov

Pavlov is out of date on this.

\[ S \rightarrow R \] an electric stimulus replaced gradually by a bell ringing at the same time. There were connections etc. took place in the brain. (Pavlov)

[Reflex means any reaction in Europe but only simple in US.]

They found that knee reflex couldn't be conditioned. Studied very simple reactions found A's were not the same.

The conditioned reaction is anticipatory set. The new idea preliminary set will lead into some movement - sometimes like old reaction sometimes a new. The stimuli produce tonic set which finally result in relaxation.

Tension \rightarrow \text{Relaxation}

Muscle tone = postural reflex

Chemical reaction in muscle - not glycogen - lactic acid

Creatine + phos \rightarrow \text{creatine}

and organs \rightarrow \text{muscle contraction}
Condition reflex: development of wants then satisfaction of wants consists of relaxation.
Child reaches, grasps and this sets up tension. There is an automatic native corrective action underlying the eye-light, eye-hand and felting reaction. Optimal condition in posture is one of least stimulation. Locomotion is an extension elaboration of the reaching grasping reaction.

Reaching sitting tension leads to random action in which incident results in the development of further learned reflex and learned reactions (e.g., grab) which result in relaxation grasping, sucking, striking etc.

Difficulty of changing habits,
Problem of learning to want.

How posture reacts and factors involved. How this child, known, how to move his arm, head, body, etc. toward the object? It is a learned reaction built up by long practice. The stimuli are visual and internal from the muscle tensions. Muscle tension pushes upon nerve endings. A posture is a constant source of stimuli, thus the tension of muscles.

Stimuli of two kinds: outside pattern and inside pattern.

How do outside and inside stimuli coordinate? The impracticality of center adjustments.

It must be explained in S→R, series. A serial self-regulation inside outside.
Posture must enter into every movement.

"Delay reaction" a method of finding how long an animal can hold a set posture. "Instant memory" cannot.

Continued steady action almost impossible for child. Inhibitory phase of posture.

Posture sets + internal tone + set not broken entirely.

Attention is a painting, focusing of organs.

Do not discuss in terms of "mind".

A unit of behavior.

Locomotion.

Posture: unit is a single reaction. 

Conditioned reflex is not a unit of special reaction. We have touched S + R but now we go into the intermediate process, nerve system.

Be careful in using term "center."

Senses are extremely elaborate reactions and are involved in behavior, muscle coordination, sight, touch.

Analysis of movement: tonic & phasic.

Dash it not particularly adequate for contracting.

1) Tonic. It antagonistic idea, muscles, balance, unbalance.

2) Ballistic. Sudden tension followed by releasing. Some ballistic cannot stop half way. Movement when once started.
We do not know much about synapses. Eccles' theory is purely conjectural. Follow this.

W. Watson's neurology

Center + 'Central' vs. Dashill.

All body is center of axon impulse. One neuron does stimulate another neuron. Nothing is started, changed, shifted at the center in spite of Dashill's theory. Dashill is not a center, merely a section of the path, grouped together.

We don't use center any more but track in speaking.

Control is not in the cells — automatic and operator telephone system — more like the former. No connections initiated in centers but originates in the periphery, the muscle or sense organ. So the center comes from the receptor and effector (This theory is contrary to popular notions up to very latest experiments)

cyclic + self-regulating = good stuff for B.S.

Control a another part whole organism.

Task of higher + lower reactions. The former involving the spinal and reflex actions; the
lower, brain etc. A combination of simpler actions.

This combination following during a practice set.

Higher control involves a posture, a tension, which focuses, combines many reflex reactions.

Relation of the brain to posture. Don't terminate.
Much of posture, tone stimuli at head end, the need for a more complex center is satisfied by growth of brain.

**Cerebellum** - small brain, gel-like.

Voluntary action - a specialized, part-time task and in that way involves choice etc.

Reflex - knee-jerk, the simplest possible reaction.

Autonomic - higher, intermediate, & lower.

[Watson is the best text for neurology] from point of view of neurologist. (also Stiles & Harman, on dept. cerebellum.)


Autonomic, sub-cortical.

Reflex + spinal cord.

Early locomotion (for example) - posture.

Voluntary action in child's focusing of attention on a particular object, and in that sense involves choice.

Automatic action consists of repeated automatons.

Serial, cyclic movements of legs.

Reflexes: action eye-lid closing, for e.g., fast blinking.

Reflexes are considered as single, simple action.

Automatic are self-containing, serial, etc.

Voluntary are a combination of lower actions, controlled.
What has one learned to do if what is there in environment to set him off (results in choice)

...directed or focused by a posture set.
...brain does not start or create anything probably. I have asked and examined lower resistance at the synapses. Know little about it.
...must has become a name for certain behavior of whole organism.

How is neuron connected to nerve fibers?
...it says much of cell bodies are near spine, also that neurons are laid end to end - why shouldn't a great many cell bodies be found all over. The neurons must be long at times (5 ft)

Posture can't be wholly separated from reflex actions because an alert posture or tension creates a greater knee-jerk. Two different kinds of posture - one direct, focus on action the other revolves it.

According to Dashiell, posture must affect the resistance at a synapse so as to make the impulses turn one way or another. (Alg on back)

Three types of behavior

1. Organism remains apparatus II Brain and consciousness

Polarity is not a property of a single cell. It depends upon the function. Impulse can be sent from cell body in either direction.
No. of stimuli & response, completeness, timing is the difference between higher & lower centres.

Wants to avoid "idea of cortex controlling movement" and that in turn controlling the spinal cord. Get away from idea of "same operator" in the brain.

A spinal cord is not a collection of synapses (E. & M. The synapses between muscle & spine are very important.

Kinds of Movement

- static, tonic - both groups of muscles acting all the time vs each other
- fixation posture - all muscles contracted (moving fixation)
- tonic movement - one muscle contracted, the other

- II - spastic type - contraction followed by relaxation

Quizzes are always on text, assignments & models.

The polarity of cells is determined at synapses. There are no "centers" - only tracts. The activity of nervous system is not confined in spine & brain. The only 2 forms of rapid change in outside...
Stimuli and to muscular contractions etc., muscle.

Continuation of Organization of movements.
1. Tonic (Tension + motion)
2. Ballistic (contraction-rate) + combination of DE Bragh

Can get all three forms in combination in one movement.

Beating time of music, back stroke + front stroke.

Be able to classify movements athletic.

Commissions are coordinating fibers. Complexes callaumes, middle commissions, & fess.

Tonic, stimuli posterior

Higher overall response

Cerebrospinal fluid

Central nervous system is not at all a controlling apparatus, merely a connecting device.

Connection of movements to other functions

1. Tonic ballistic

Posture and slow movement

Outside stimulus | eye

Inside | press on muscle

2. Ballistic

Outside stimulus | eye

Inside | start step

Both start +

Stop of movement

Start movement
time between flexory extension ought to be the same, no matter how long the movement.
The speed of the movement is regulated, not the time.
Time equals the time for flexor to stimulate extensor.

An example of a skilled movement - writing
With high speed comes a curvilinear writing
Take beating time to speed it up
The beat stroke is the same as writing stroke
A B C D E F G H I J K L M N O P Q R S T U V
B C D E F G H I J K L M N O P Q R S T U V

If we are more three movements as the writing slows down.
The dividing line between ballistic and three is very definite.

In a slow movement, the antagonistic muscles
are always contracted at least enough to keep the
motion well directed, controlled, straight (running)
- Find out what ‘distal’ means
- Can combine movements to make them simultaneous

- The simplest possible movement
- Combination involves a combination of this kind
- Posture, factor + supporting factor + must always
support + the tense + ballistic movements.
(Crouch in walking is ballistic, feel the propelling effort are time)
- All their ballistic strokes must be prepared in advance.
The number of muscle fibers must be determined before hand.
Throwing - the movement is a testing out of the aim.
Tense movements can be adjusted from stimulus.
There is no knowing just how the number of muscular fibers is determined. It depends upon the central stimulus pattern of interneuron which came from posture factor.

This is a certain kind of memory inancelled so that you can adjust succeeding attempts, i.e. the set up established can be changed by preceding movement. A sudden incidence outside stimulus sets off the ballistic movement while one stimulates other. Adjustment to different keyboards, pianos etc. takes care of itself, one is not conscious of it. Such adjustment is a part of learning—adaptation to environment etc. Another one of characteristics of learning.

We are gradually waking up the "learning process." "

Relation of movements to learning.

Learning involves a posture set up to check a series of movements. A series of slow supporting movements to support and pursue the other movements. Almost all we learn involves a series of movements, ball and trio, supported by three鼬fone and stimulation.

Doctrine of slow learning slow at first—speed up (false).

Speeding up involves a change from tonic to ballistic plus a greater number of fiber contractions especially in series.

Both involve same outside pattern but are different movements.
The problem is still open but I still believe it is just more in the past practice.

(Does no good to practice slowly!)

Bilateral serial Time
Walking, running, skating, tennis, swimming, skipping, throwing, kicking, pitching, batting.

The same repeated movement from same practice, all done in alternate movements.

Most of above are simple enough so that once learned, they usually stick, but the magic is different, more complex. A simple movement which is repeated is remembered longer.

[Magill's]

But we know now that nervous system does not work that way. There is no tension or increased potential in nervous system. The tension is only in muscles. Like telephone system, increased rings will not get call thru.

There is no particular path that works directly from muscle to muscles all established over which the impulse will pass in predetermined manner. The habit is not in any particular muscle, central nervous system, or sensory organ. This is too simple (you can write name with foot as well as with hand). It must be determined by changes in the muscle condition.

Where reasoning involved in many simple habits.
Learning consists of setting up of a posture and this posture organizes the actions.

We learn integration from very beginning, it isn't built up after the habit is acquired in parts. It doesn't mean how movements organize change of self in line with same reason.

Difference between 10 and our treatment of 1.

1. Integration - securing posture
2. Analysis of movements

We have no idea what happens when habits are built up. Analogy of automatic telephone.

Patterns in periphery which are somehow connected.

The Senses

A classification - not on kinds but function.

A. All together pattern 'spatial' simultaneously
   1. Pressure (through kinesthetic)
   2. Visions (a chemical sense)

B. One after another, serial - temporal
   1. Pressure (touch - kinesthetic / muscle)
   2. Hearing (a wave form)

Can have a quite normal human experience.
We know very little about some organs, but we must about the muscle spindles, skin, glands, or end organs for touch.

Figure on skin in book p. 86 was purely imaginary.

The hair follicles seem that if a cat. Is that possible?

- but the hair follicles are not the only pressure organ. An artificial hair in place would...

We know cutting a worm is cool except that it depends upon the amount of reflexes in the skin.

The punctiform theory does not work. Experiment by marking spots, removing skin and looking for end organs. This is the mosaic theory, but they found for particular endings under the spots. There are definite spots that meeting under them. After each spot were burned out, the sense of these touch sensitivity.

Difference in distance between pressure points depends upon distance in space, not a distance from each other on the skin. Spatial threshold depends upon ability to discriminate between points in space.

- Can't tolerate cold from intense heat. How to respond to cold & heat stimuli - to feel it.

The relation of extrinsic pattern to skin situation.

Waves, rapids, crevasses - not a matter of stimulus but the reaction patterns familiarity with the area.

- Adaptation then continued adjustment to outside pattern.
First outside pattern
Now one maintains balance
1. Semi-circular canals
2. Vision
3. Active touch contact
4. Muscle tension - stimuli from

Rod + Cone layer is furthest away from light
Active touch - active sight

Perhaps comes for color - needs for black + white

Perhaps all you can say is that there are "processes"

Could assume 13-W process danny + Y-B + N. Here

Speculation about chemical compounds. You can say
there are 3 reversible processes

These colors are distributed in zones which overlap

Pigments are altered from time to time

Satisfaction depends on security black + white with original

Muscles in eye
Lenses for process of accommodation
Six muscles

Each eye gives an image of its own which overlap
and thus gives one to dizziness (leaning in dark)

Bivocular vision - should be trained before 10 yrs old

Audible at 100 - 105 rev. visual
Helmholtz's theory of hearing is somewhat similar (a pitch for a pitch) 1716. Sheer pitch sensation. This is perfectly
much improbable. It sounds are very faint at extremes of scale. e.g. a 1st pitch relates to a
The other theory: cochlea, a tube of solid bone
covered by the inner membrane. Here is its membrane role.

called the telephone theory because the telephone vibrates. In which
Nobody knows which is correct - attempts at combination
It does not like the Helmholtz theory,

Usually deafness caused by insensitivity of ears due to thickening of membranes.

Not a D. pitch means a frequency, but it depends
upon harmonics which the ear adds, prep;
you can count out the fundamental + several overtones
and yet still hear a fundamental or pitch. A partial
is an overtone. Every time the string vibrates, the
higher will be the tone. The tone we hear is about
the middle of partials and this is the pitch. Then,
pitch is a special kind of true quality.

Can respond to sound with facility. It is
important to group sounds; their rhythms, etc.

Works don't want a college course, but
want to try it. You can't see results. To want it.
Child has little or no ability to deal in futures.
Receptors classified according to function: distance receptors: vertical, simultaneous active touch, skin + muscle + seeing.

Temporal period: many receptors

Serial: active touch, hearing, distance sense, open active touch remains the fundamental reception

Link up with posture:

The gravity stimulation + that in the muscle endings.

Gravity

Semi-circular canals + active touch in muscles + in skin + seeing. sem. cir. + active touch + muscle fields.

In the child it starts in sem. cir. canals then to active touch and finally the field of vision. Field of vision is kept constant by posture - the sense of vertical + horizontal - Don't see with eye alone, seeing depends upon other senses. Hearing also calls into operation organization of movement - it depends upon movements which in turn involve active touch. Posture involves four or five different kinds of movements.

Link up with creeping - go back and see how the whole behavior involves all of the previous discussion.

Repeated serial movement controlled by posture.

When reaching changes to creeping, the distance reception are involved.

We can get at results of human behavior, but the intervening behavior is all misty. Can get an idea of stimulating...
and the patterned response.

Behavior to be explained—how? It is all built up, all learned, (a denial of instincts.) Here are no fundamental actions or instincts. (Fear, love, etc.) is only name for a combination of reflexes.

Everything is learned—artificial, not natural. The various kinds of stimulation and movement organization.

Out of two fundamental groups of sense organs, the fashion they have to do with creeping, how organization occurs.

Outside pattern of stimuli don't matter till responded to. It is not a pattern really until it is organized.

Head—holding = gravity (posture) = a long learning.
Eye—light—hand = (grasping) = a long process.

Out of such material patterns are finally organized.

Learn from these various kinds of stimuli such as active touch + vision + act. touch + hearing.

Then these forms, the stimuli are organized. Conditioning another word for forming habits.

A simple type of habit, the RS are not identical. When have a slower movement or posture, then the conditioned movement becomes a part of the group movement.
Therefore must begin with 'going' movement. Must first
have the 'going' movement and then other movements
which can cause relaxation become a part of this
movement. No learning, or combination unless this happens.
Creeping, rolling etc. will become organized only
when they can become a part of reaching movement.
Condition. Set up a tension and then such movement
as we'll face with it will in that sense become
conditioned.

We do not know how muscle action is directed, the
muscles just seem to blunder into the channels which
we desire to put them.

As far as conditioning these movements blunder in.

'Let up the posture and you will play better.'

(can't say just how you will do this or that, but
get the general posture and these will come.

Habit is a changing reaction, movements drop out.

Anticipation is very important in card-

'... These movements get in which can fuse with posture
not essential to...

Ways movement get together, ballistic supported
by slow posture organized slow fast movements unit

Movements become finer & more ballistic, all the
result aim and remain the same.
Character of visceral-muscles + a different classification of direct

Effectors for emotion (Dashiell doesn't come right on)

A mass of reflexes just as in skeletal behavior is what accounts for emotional behavior.

1. Gravity + head-holding posture
2. Eye light
3. R-l + f-b
4. Knee reflex + flexion
5. Extension

Emotions are exactly like other habits and interests developed and organized in being learned. We do not count these visceral activities as behavior. They either facilitate — modify or affect skeletal behavior — considered primarily as something else.

Because there is nothing rapid, direct, or precise about this activity, you can't expect them to lead off to any action. A large amount of visceral behavior doesn't affect behavior at all.

'Statey' thinks treatment of organs as effectors is all wrong.

Secondary stimuli — part of sensory-motor process

The steps of stimulating the muscles:

dog + cat — vision — more blood — adrenaline — blood to muscles.
Only motor nerves connected with them. No sensory endings in the autonomic system.

These movements are very slow. They will respond before the skeletal reactions, so the visceral actions modify the skeletal movements. So the smooth muscles are not a system but only a motor branch. It is possible that whole skeletal muscles are not connected with visceral organs.

Visceral muscles innervated by motor branch. Then the stimuli from visceral contractions (organic sense organs) into the CNS again. Also the glands are affected by the contraction of arterial muscles. Sympathetic system in only a motor branch.

Stimulation from visceral muscles never causes a skeletal contraction. Modifies the action thus slow process.

So you get an elaborate skeletal response before the modification by visceral gland stimulation occurs.

"A person strikes but is not angry—merely a habit seen part of skeleton can't predict emotional responses. They come in mind of kitten playing and fighting is different (also from child's diet)."

Can describe an emotional action only in terms of skeletal.

James does not distinguish between visceral and skeletal response. We think of emotion, like any behavior as occurring at once, consciousness in brain?
The James-Lange theory: sensations arise in consciousness via brain stimuli set up a reaction in brain which is a result of organic stimuli which produce sensations (which produce emotions). The impulse goes through the brain down and back to brain again where the sensations from bodily change cause the emotion. We think emotions pretty much innate.

Now we don't separate brain from other tissue, nor do we have sensations. The experience is overall dependent upon total reaction. The only difference between emotional behavior, skeletal and visceral activity is that visceral present. Muscles and glands are involved in emotional behavior, both muscular and chemical stimulation from glands.

How does emotional behavior get started?

How does emotional behavior get started?

Dewey - emotions produced by conflict of skeletal reaction. Excess skeletal reaction in which great tension is developed leading visceral special form of stimulation from specific stimuli organs for specific stimuli.
We do not know how the tension causes visceral reaction nor how visceral affects skeletal. Except that ductless glands influence chemistry.

Motivation and relation between visceral and skeletal behavior: reactions. We have continual stimuli.

Viscera concerned mainly with viscere stimuli (the neurogenic stimuli from skeletal muscles, cyclic, etc. and the organic stimuli from visceral organs). The chemical stimuli from hormone of ductless glands.

Outside S's might be continual or instantaneous, but the inside S's are continual, cyclic, slow.

It has been determined that behavior is started by the visceral musculature (contractions of stomach, etc.).

Dashill doesn't stress this as much as others.

Organic stimuli start only that behavior which has been learned. The reactions are all learned. (The stimuli set up in hunger & response after learning how tension can be relieved. When these are learned they become fixed responses. The glands don't lead to any particular reactions. Thus do not direct any behavior. Skeletal muscles in main want start below. So it is either outside or visceral stimuli which start behavior.

Outside stimuli: gravity, press, light, eye press, etc. These direct and organize behavior!! Are probably important factors in instinctive behavior—especially in the organization of behavior which can deal with environments.
Beginnings of behavior = gravity + our sight both connected with pressure. These are really only due to other stimuli occasion reactions which are fixed in the behavior skeleton.

Perception D does not give elementary material perception where? and what?

James used to look first at object - the awareness of an object present to sense... then at sensation

1) There are numerous patterns for some perception.
2) And the pattern itself may change.
3) The object also may change.

The reaction is what remains stable.

It follows that same at pattern may not be same for 2 people depends upon the reactions around. Everybody views world in terms of their own responses. (Permit to change)

Lower animals don't react to same object under different contextual circumstances in same way (wasp + spider)

Object will be in some context, an outside arrangement

You never get reaction to a single simple stimulus pattern but only as part of a larger organization. (Something like change in same stimuli?)

Movement = motion action = motion + purpose
Per. = accept or preparatory reaction as distinguished from the actual activity.

But you can not tell where the line between the preparatory action and the action should be drawn. In some cases there is no completing of preparation, but it blends right into real activity. 

"Orientation" does not come to end. The preparation is so general, large, that not all the possibilities will be completed at once.

You can say the earthworm has certain possibilities that cannot be completed like telephone, a person knows more than he can do.

The peak load of possibilities that might be connected.

Difference between thinking and acting.

Thinking consists of possibilities for action which are not all realized (the realizable).

Libel in newspaper—from sold—like inside—outside activity.

Does not depend upon obvious movements. Thinking occurs in all kinds of terms.

Symbols formed gradually from more complete stimulus—process of conditioning to recognize these symbols, which have become separated from original stimulus they start growth.

The cathedral analogy: stone, brick, wood, etc. gradual. Make preliminary experiments with symbols, a matter of substituting more advantageous materials experimenting with a little which will represent whole. Thinking saves time, expense, etc.

Behind an example of social stimulation—the intelligence of the whole.

Perception → preparatory, preliminary orientation, experiment with reaction which have not completed themselves but which are capable of completing.
Knowledge is you are set to do the possibility capacity for action which cannot be completely carried out. Knowledge always precedes activity. Knowledge is a kind of preparation of whole mind. Single the perception is a kind of reflexive relation.

We have two kinds of knowledge - group and individual. Even just knowing a fact is a kind of preparation. He is a part of perception. Perceiving is the 1st stage of thinking process. Perception = 1st stage of making possible reactions which may or may not be carried out which constitute what we call knowledge.

Perception in a simple case.
The sprinter on his mark - allowed reaction, like dog in lighted doors - he has a whole set up. It is a perception. It's oriented to spatial situations, type ground, terrain, posture, waiting for the signal. Perception - perception + reaction. Can't draw any line between the signal and the reaction.

The running is the way he gets the stimulus - they see one + some reactions lined up each other. But you can show the stimulus but the perception from it. The reaction can't be separated.

An elaborate case: Reading

Type patterns \rightarrow synchronization \rightarrow pronunciation

apparently \rightarrow perception \rightarrow thinking \rightarrow action
organization determines what you will make of type patterns. The letter words are read in terms of the organization. So you cannot separate the perception from organizing.

Pen and take four cases: simple + complex + analyzed percepts, organize, action all three stages depend upon the one before. Simple direct reaction + response and the more complex choice reaction. Can determine these by time consumed in action 15% - 25% for example. Often the perception + response + action sometimes perceived. Why distinguish between perception and reaction? Why?

Many preparations made, which are not completed. The thinking + perception are very important to humans. S-R=<0.5 reaction before perception. No perception in reflex reaction of spinal cord. Automatic reaction do involve perception.

One object or two objects? In groups or social situation. The field involving perception, sensation, pattern matching, vision. In this field we say we see two lights or a pair of lights. What separate lights? (The process of manufacture) the movements involved in forming the object depend upon the difference of perception of each individual. For example, A whole table, or objects based upon. What process of function depends upon. Habit, custom, the way you handle it. Of deal with it as whole, call it one, two, two.

Park of prime set - or separate, one two: two - one.

Percep. = knowledge which depends upon past experience

→ imagination

→ not knowledge.
Vocal cords are stretched cords.

1) Articulating apparatus (lips, etc.).
2) Larynx: cushion pipe.
3) Bellows (no pressure).

"Sound" consists of consonants and voiced sound.

The larynx does not depend upon the larynx. Working in the chest.

Syllable begins by a puff of air from chest which then modulated by lips and resonance.

Small muscles of small muscles for syllables.

Larger groups which take care of phrases, supporting.

External intercostals---inflation, internal intercostals---deflation.

These are the short muscles for high-speed puff.

Diaphragm---inspiration, abdominal muscles---expiration.

"Phrase movement" is a slow, adjusting movement to support the wind. Puffs, keep a fixture.

The little puff---make time at larynx. Lip stop.

Sounds & consonants: /k, t, p/.

Consonant blocks come at death end and beginning. Time at beginning releasing.

Consonant releasing.

Vowel shapes of nasal nasal.

/a, e, o, u, i, y/.
1. Inferior and superior intercostals, ribs
2. Psoas abdominis and diaphragm for phrenic, change of posture
   another side involved
   may result in larynx
   sup.
   Correlation is not a matter of elevation (this
   is only in sleep breathing).

Against in speaking, swaying, to inflate chest, try to keep chest.

Pleurae
- Cervical
- Thoracic
- Abdominal
- Pelvic
- Pericardial

Mesentery
- Membranous
- Peritoneal

Fractures
- anterior
- posterior
- external
- internal

Internal intercostals

Pleurae

Musculature

Don't have to know details merely the fundamentals of the

Pulmonary...reaching and resting

Ballistic movements

Showing that the movements are ballistic.

Accent

Said that the accent on verbiages is

Matter of supporting muscles, adding in quickstep

Culmination of supporting muscles.

Fr. has phrase accent not word accent. In English the

Phrase accent has to be accommodated to word accent.

French has dropped resting accent. Phrases grouped

Together into periods which correspond to our breath.
Native language range from simple perception to symbolic/parasymbolic. Notice development of perception for next semester.

Speech abbreviated to implicit forms. It says yes perhaps an internal speech runs all the time. Experiments D. Selows are extremely crude. They say it may be there, but you can't prove it. Internal speech does not affect the breathing, so these movements are very different from normal speech.

Thinking (just as reading) goes on in feet or words though it is not a mere matter of implicit speech.

The syllable is a ballistic thing and so you can't get slow speech. Child's phrasing is almost as fast as adults. The pause between syllable phrases is where he slows up. Child gets syllable accent even if sound gets phrasing expression. Words come separately with tone expression.
Ruskin Selections  C.B. Tinkered

Past + Present

1. 74-114

2. 115

3. III - 192

4. 196

5. 198

6. Finish quiz, Gavron's life

we, titles, Maps in Guide

Ruskin's 7 Lamps of Architecture  One lamp a lesson
Notebook 1

Def-> behavior -> individual = our schedule work

We don't know how sense organs act as yet

Learning = a psychological change - but no method of inspection psychological law to discover the difference between a person's file and other

We can explain input in terms of physics and chemistry what goes on between them?

output

James 'brain path' and the 'condition reflex' are no longer accepted as true. Have fallen down.
Review Questions. First Semester, 1931-32

1. Using psychological material, illustrate the practical, aesthetic, philosophical and scientific attitudes.

2. Distinguish psychology from physiology.

3. What are the implications of the S-R formula:
   1) re the places where the organism may be stimulated;
   2) re the parts which respond;
   3) re the possibilities of self-control;
   4) re the conditions of motivation.

4. Cite concrete illustrations of the role of postural set in
   1) the conditioning process;
   2) skilled movements;
   3) mental attitudes.

5. "A certain amount of maladjustment of the animal to its environment is a sine qua non to novel response." Cite an instance in which the disturbing factor is (1) external; (2) internal. Indicate the receptors involved in each instance. Compare Dashiell's description of the character of the animal's R. to maladjustment with Dewey's in "Human Nature and Conduct," Pt. II.

6. What features of the activity of striped muscles are of special significance to the psychologist?

7. Cite three instances of the action (1) of smooth muscle, and (2) of gland, acting as self-stimulant.

8. Psychological processes are all reactions. Describe the reaction involved in a representative sensation, such as tasting sugar, or hearing a bell. Cite an instance illustrating the process by which a stimulus acquires meaning. Cf. Dewey's discussion of the meaning of impulse.

9. Indicate the role of kinesthesia in (1) tactile perception; (2) in visual sensation; (3) in skilled movements.

10. Cite five instances in which muscle tension (or distention) acts as a stimulus.

11. Does the organism act as an integrated unit, or is the reflex the elementary action-unit? Which concept constitutes the better basis for a theory of inhibition?

12. Characterize the child's innate equipment of reaction tendencies. Report your own conclusions re a minimal list.

13. Just what is the error of conceiving of an instinct as a driving force? How do you dispose of the factor of energy in mental activity? What parallel is there in behavioristic theory for McDougall's "boilerful of steam"?

14. Why do one's interests have such a hold as they do on one?

15. Review the position of the following groups with reference to the
Central features in human motivation: Platonists, Voluntarists, Psychoanalysts, Thorndike, Berman, Kempf, Dashiell, the Oberlin group.

16. How do one's dreams reveal one's personality?


Neurosis and psychosis: heredity vs. transmitted; pathological vs. a-normal.
2. Symptoms of hysteria: amnesia, amnesias, fugues, tics, obsessions.
3. Dissociation theory of hysteria. False attitude, need of conversion.
4. Identiational factor. Suggestion? Judgment? 
5. Theories as to cause of stammering. Methods of re-education.
6. Physiology of the sub-consciousness (Kemp, White.) Fixation, compensation, Oedipus complex.
7. Development of the delusion; relation to reasoning; source of the content of delusion.
8. Manic depressive insanity, why chemical? Degenerative insanities, why lesions?
10. Use of tests and their limitations in dealing with f.m.
11. Training for the deaf: language difficulty and methods.
12. Aphasia: various forms; relation to the speech of the child, and of the f.m.