

## THESIS.

Subject: Thinking.

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Thinking may be defined as a going over, sorting and arranging the store of particular cognitions gained by sense-perception and retained by the memory.

Like other forms of cognition it has to do with discrimination and assimilation; in detecting differences and agreements.

It differs from these however in its mode of exercise; thinking is discrimination and assimilation performed on the results

of sense-perceptions and reproduction; it is also of a higher kind involving much more activity of mind.

Thinking is closely related to Understanding, the two words often marking off the same of the operation of the intellect.

A child apprehends a particular object as an animal that is as distinct from other objects or other things surrounding it that have a particular shape or size.

He comprehends it when he recognizes it as a horse.

In the same way he understands the fall of rain, when he takes a pail filled with water and finds it has weight.

Thus to understand things is to assimilate them to other things, and this is what is meant by thinking.

All thinking implies the comparison of one object of thought with another, and in an act of comparison

the voluntary attention is directed to two or more objects of thought at the same moment or in immediate succession with an aim to discover any differences or agreements which may exist.

The objects may both be present, as when a teacher compares the writing of a child with the copy, or as often happens may be represented as when we recall a certain place we have seen to compare with a place we have not seen.

It is allowed by all that there is an intimate connection between thinking and language; and man is distinguished from the lower animals by the attribute of speech as well as by that of understanding.

The thinking powers of the several races of man kind vary with the degree of complexity of their language, they may however be trained alike to some extent.

The child's power of thought grows step by step

as his power of expressing himself improves and much of the thinking done is carried on by the aid of the spoken language, all that is connected with observation or the exchanging of ideas.

And even in the case of solitary or silent thought internal observation tells us that an inaudible or suppressed speech cooperates.

In fact it is only by use of language or some other equivalent set of signs, that strictly speaking we can think.

In common there are three stages of thinking distinguished. First a formation of general concepts which may be said to constitute the elements of thought, for example weight.

This is called conception. Next to this, or second, comes the combination of two concepts in the form of a proposition as, bodies composed of material have weight.

This is termed an act of judgment, and lastly we have the operation by which the mind passes from certain judg



ments or statements based upon  
the former judgments, such as:  
All men are mortal.

John Smith is a man.

Therefore John Smith is mortal.

Thought may be untrue  
to its high aim and occupy  
itself with the fineness of  
formal logic, thus dealing  
with formalities in place  
of dealing with the informal  
subjects of thought.

The exercise of thought is  
greatly mixed up with volition  
also, but there is rarely any  
difficulty in distinguishing

the two factions.

Thought is sometimes so quiet so far removed from bodily demonstration that we might suppose it conducted in a region of pure spirit merely importing its conclusions through a material that comes between.

The fact now however is generally admitted that thinking exhausts the nervous substance just as surely as that walking exhausts the muscular substance.

We are not sufficiently

aware of the need of thinking  
upon the subject of pedagogics.

In all callings the mass,  
because it is the mass, does  
not possess an analytic mind,  
does not work intelligently, but  
merely repeats the old pro-  
cess of others gone before.

Hence no calling is, nor  
can be exempt from this  
necessity, and hence again  
the function of the man of  
thought in education.

Each generation has to  
discover truths anew for  
itself, hence the need of good thinking.

The world's real teachers  
have been but six or eight  
men out of the countless bil-  
lions that have lived and  
died: while the effect of all  
others has been but to  
familiarize or utilize the  
the mental products of these  
men; hence again the need  
of thinking to find out  
what Shakespeare, Milton,  
Homer, and hosts of others  
have in store for us; again  
there must be thinkers who,  
more or less satisfactorily,  
more or less acceptably, more

or less perfectly shall determine the ends to be attained by each and every study and the instrumentalities to be employed in the studies.