## "SENSATION—IDEATION." from Philosophy of Chiropractic: Volume 5 (1919) J. H. CRAVEN, D. C., PH. C.

The tissue cell being in contact with the afferent nerve, vibrations that take place in this tissue cell are impressed upon this nerve. The function of the afferent nerve is to transmitvibrations, as the function of the efferent nerve is to transmit mental impulses. Therefore, following "vibrations" we have "impression" and "afferent nerve," then "transmission." That which is impressed upon the afferent nerve is transmitted to the brain cell where the mentality resides. The process which takes place in the brain cell is called "mental interpretation." The result or product of mental interpretation is "sensation." We might say that Sensation is the result of interpretation of vibrations, while Ideation is the result of the reasoning of Innate Intelligence upon the sensation, although in the strictest sense there could be no mental interpretation without some sort of ideation, but sensation, when compared with ideation, would be the *unit*, while *ideation* would be the sum of the *units*. Again we might call attention to the axiom, "the whole cannot be greater than the sum of its parts." The ideation is the completed picture which Innate Intelligence has of the condition of the tissue cell, while sensation is the process which gives Innate this picture or knowledge. We can best illustrate this thought by using the educated senses.

Some seem to think that the general idea of Chiropractic Philosophy is founded on old exploded and discarded theories, but such is not the case. Chiropractic has taken that which is good in other lines, but has gone farther in the investigations than previous scholars. I will read an extract from "Psychology and Psychic Culture," by Halleck, and you can draw your own conclusions. In defining sensation, he says: "A sensation is a state of consciousness resulting from nerve action. When a stimulation of the retina by light is transmitted by the optic nerve to the brain so as to affect consciousness, the result is a sensation. No one can tell us why nerve action affects consciousness, but such is the fact. Sensations are not knowledge any more than wool is cloth. They are the raw materials out of which knowledge is slowly spun. Sensation accompanies the exercise of the senses and the nervous system in general, when the latter is sufficiently aroused. Not all nervous action appears in conscious sensation, since a healthy nervous system is fortunately a machine which obtrudes no more of its business on consciousness than is sufficient to furnish the raw material of knowledge. The capacity for sensation lies at the foundation of all knowledge. Innumerable things in nature cause sensation in the ear, eye, nose, mouth, skin and muscles. Our knowledge of the world is merely the proper interpretation of these sensations."

If you will take the trouble to analyze this paragraph you will see how it harmonizes with the Chiropractic idea. "Sensa- tions are not knowledge." "They are the raw material." The same author says "there must be a conscious agent fitted to respond to the stimulus." "There must be a stimulus," "there must be nerves capable of transmitting to the brain the effects of the stimulus." In other words, there must be a stimulus producing vibration in the tissue cells at the end organs of special sense this vibration is impressed on the afferent nerve, transmitted to and received by the brain cell where the "conscious agent" resides which is spoken of in the cycle as mentality, the mentality interprets the vibrations, which gives us sensation, the reasoning upon the sensations gives us Ideation. "Our knowledge of the world is merely the

proper interpretation of the sensations." We notice that Halleck says "not all nerve action appears in conscious sensation," where then does that nerve action appear that does not "appear in conscious sensation"? If some nerve action is interpreted by the "conscious agent," then all nerve action must receive some sort of interpretation, and that interpretation which does not appear in "conscious sensation" to the Educated Intelligence is interpreted by the Innate.

Our knowledge will depend upon the amount of vibrations we become capable of interpreting educationally. As I have often told you, the development of the sense of touch is not a matter of increasing the number of touch corpuscles in the tips of your fingers or even increasing the number of vibrations, but the proper interpretation of these vibrations; and the greater the number of vibrations interpreted and the more accurate the interpretations, the keener will be our sense of touch.

We know there are certain limits of sensation. There are, beyond a doubt, vibrations which the nerves are not capable of transmitting. A certain amount of stimulus is required to overcome the inertia. When the atmospheric vibrations are not greater than 10 per second, the inertia is not overcome sufficiently to render us conscious of sound. Sound may be heard when the vibrations have reached a minimum of 16 to 30; when they have reached a maximum of 36,000 they are beyond the power of the mind to interpret, until the 36,000 vibrations of the air have passed over into 18,000,000 vibrations of ether, which gives us the sensation of heat. Then there is another jump when the vibrations become 462 billions per second, which gives us the sensation of light.

As the vibrations increase we get the different colors until the vibrations reach 733 billion, which gives us darkness. So we see sensation is limited within a certain sphere.

Sensation is the result of the interpretation of vibration whether received from the organs of special senses or general. According to Baker, the general sensations are classed as *muscular, sensations of injury, fatigue* and *repose;* nervous sensations arising from the state of the nervous system, as when we feel the exhilaration of perfect health or are weakened by care or suffering; vital sensations, depending on the condition of the vital organs, as those of hunger and thirst and their opposites; the feeling of suffocation.

The special sensations are those of Touch, Sight, Hearing, Taste and Smell. The interpretation of vibrations received from an organ of sense would constitute the sensation, while vibrations received from many organs of sense would constitute ideation. The completeness of the ideation would depend upon the number of sense organs involved. To illustrate: An apple is brought within the range of sight. Vibrations are set up on the retina, transmitted through the optic nerve to the brain and interpreted. That constitutes sensation. We are told this object is an apple. The sound waves produced by the vocal cords set up vibrations in the ear and the auditory nerve conveys these vibrations to the brain and Innate Intelligence interprets them. This also enters into the ideation. Someone asks now for a description of an apple. We say an apple is a round, red object; but now I use the sense of touch. These vibrations are carried to the brain cell and interpreted and this interpretation also enters into the ideation. I use also the sense of smell, and the sense of taste, and these vibrations are interpreted and enter into ideation. As "sensation" follows mental interpretation of vibration, so the "ideation" is enlarged with every added "sensation." Ideation constitutes the knowledge which we have of any object and this is stored away in or retained by the Innate

Intelligence. Now, when vibrations are carried to the brain by any of the sense organs coming in contact with an apple, we have presented to consciousness, not only the interpretation of these vibrations, but we have the complete ideation brought to mind by the Innate intelligence. Therefore, if an apple is picked up in the dark we recognize it at once as an apple because we at once associate the interpretation of the vibrations through the sense of touch with the ideation which we have of an apple.

Again we might illustrate in this way. We go down to the river; as the different objects come within the range of vision the interpretation of the vibrations enters the conscious mind and, as our attention is drawn from object to object, the fringe of consciousness is enlarged and we become cognizant of all objects within a given radius. We see the water, the trees, the boats, possibly a wing dam, etc.; we see a boat in which is a party of young people, we hear their shouts of laughter. We may study the surroundings until we have a very complete ideation of the entire situation. Now the boat capsizes, we are impressed with the cries of the young people for help, we go to the rescue. Now our ideation includes more than before this accident. Other vibrations have been produced and interpreted and become a part of the picture which is being formed. After many years we return to the same place on the river bank. Through the law of the association of objects, we "remember," not only this spot, but the circumstances connected with this place. We again in our minds see the boat, hear the laughter, then the cries for help, and as this all comes vividly before the mind we shudder, it is all so real. This is a practical illustration of how Innate Intelligence works through ideation. In seeing the object that produced the vibrations, the interpretation of which formed the original ideation, there is not only an interpretation of the vibrations from these objects, but also a presentation, through the educated mind, Of the complete ideation that was formed at the time of the first interpretation of these vibrations, and Innate Intelligence recognizes these as being vibrations similar to those interpreted previously, and it only requires the interpretation of any set of these vibrations to bring out, on the canvas of memory, the complete ideation. This answers many questions with regard to the laws of thought and why familiar objects bring back to mind all the circumstances connected with the object. The step ideation is one of great importance, for upon ideation depends the intellectual adaptation of innate intelligence. The power to retain the ideation is a function of the innate intelligence, but the production is always through the Brain Cell, therefore we speak of it with relation to Educated, as remembering or bringing back to mind.

The complete "Ideation" or coordination or normality is retained by Innate, and as vibrations are received and interpreted there is a constant comparison of this interpretation with the ideation; if the two correspond then all is well, and we call the condition coordination; if they do not correspond, then innate begins her process of "Intellectual Adaptation," which is considered in the next lecture.