gather that the state of the attention has a great influence upon the reaction. As we would expect from our ordinary experience, when the attention is taken unawares a longer time is required to respond actively to external influences.

Another exceedingly important influence is practise. This is due to the artificial conditions of all experiment, and the increased facility we acquire by personal adjustment. We react a thousand times daily under less artificial circumstances, and since the reaction time is diminished by practise, it is probable that our customary, habitual, responses to stimuli of sense are more quickly performed than the most favourable experiments would indicate.

Having now reached what may be called the "mental" time (P) the question arises: how is this to be divided between the perception or apprehension of the sensation and the volition to respond by movement. Two methods of experiment have been devised for breaking up this period into its elements. The first consists in experimenting on cases of very close physical association—as between hearing and speech, right hand and foot, etc., where the reaction is almost automatic and the will element is practically ruled out. The subject agrees beforehand to repeat any familiar word spoken to him as soon as he hears it. Experiments of this kind led Donders and Jaager to the following principle: the relative times of perception and volition depend upon the degree of physiological association between the receiving and reacting organs; when this association is close the mental time is largely taken up with perception, when loose, it is nearly all occupied with volition.

The other method, that of Wundt and Baxt, consists in repeating the excitation one or more times before the voluntary impulse for the reaction is given. Thus the perception element is repeated and the difference between this time and the simple reaction time is the time due to the additional act of perception. For example, let two equal and moderate excitations, say bell strokes, follow each other quickly, the reaction being made only after the second; we then have