

here have a great advantage over teachers. In fact, the law of transitoriness has little chance of individualized application in the schools.

Such is the little interested and impulsive psychophysical organism whose springs of action the teacher must divine, and to whose ways he must become accustomed. He must start with the native tendencies, and enlarge the pupil's entire passive and active experience. He must ply him with new objects and stimuli, and make him taste the fruits of his behavior, so that now that whole context of remembered experience is what shall determine his conduct when he gets the stimulus, and not the bare immediate impression. As the pupil's life thus enlarges, it gets fuller and fuller of all sorts of memories and associations and substitutions; but the eye accustomed to psychological analysis will discern, underneath it all, the outlines of our simple psychophysical scheme.

Respect then, I beg you, always the original reactions, even when you are seeking to overcome their connection with certain objects, and to supplant them with others that you wish to make the rule. Bad behavior, from the point of view of the teacher's art, is as good a starting-point as good behavior. In fact, paradoxical as it may sound to say so, it is often a better starting-point than good behavior would be.

The acquired reactions must be made habitual whenever they are appropriate. Therefore Habit is the next subject to which your attention is invited.

VIII. THE LAWS OF HABIT

It is very important that teachers should realize the importance of habit, and psychology helps us greatly at this point. We speak, it is true, of good habits and of bad habits; but, when people use the word 'habit,' in the majority of instances it is a bad habit which they have in mind. They talk of the smoking-habit and the swearing-habit and the drinking-habit, but not of the abstention-habit or the moderation-habit or the courage-habit. But the fact is that our virtues are habits as much as our vices. All our life, so far as it has definite form, is but a mass of habits,--practical, emotional, and intellectual,--systematically organized for our weal or woe, and bearing us irresistibly toward our destiny, whatever the latter may be.

Since pupils can understand this at a comparatively early age, and since to understand it contributes in no small measure to their feeling of responsibility, it would be well if the teacher were able himself to talk to them of the philosophy of habit in some such abstract terms as I am now about to talk of it to you.

I believe that we are subject to the law of habit in consequence of the fact that we have bodies. The plasticity of the living matter of our nervous system, in short, is the reason why we do a thing with difficulty the first time, but soon do it more and more easily, and finally, with sufficient practice, do it semi-mechanically, or with hardly any consciousness at all. Our nervous systems have (in Dr. Carpenter's words) *grown* to the way in which they have been exercised, just as a sheet of paper or a coat, once creased or folded, tends to fall forever afterward into the same identical folds.

Habit is thus a second nature, or rather, as the Duke of Wellington said, it is 'ten times nature,'--at any rate as regards its importance in adult life; for the acquired habits of our training have by that time inhibited or strangled most of the natural impulsive tendencies which were originally there. Ninety-nine hundredths or, possibly, nine hundred and ninety-nine thousandths of our activity is purely automatic and habitual, from our rising in the morning to our lying down each night. Our dressing and undressing, our eating and drinking, our greetings and partings, our hat-raisings and giving way for ladies to precede, nay, even most of the forms of our common speech, are things of a type so fixed by repetition as almost to be classed as reflex actions. To each sort of impression we have an automatic, ready-made response. My very words to you now are an example of what I mean; for having already lectured upon habit and printed a chapter about it in a book, and read the latter when in print, I find my tongue inevitably falling into its old phrases and repeating almost literally what I said before.

So far as we are thus mere bundles of habit, we are stereotyped creatures, imitators and copiers of our past selves. And since this, under any circumstances, is what we always tend to become, it follows first of all that the teacher's prime concern should be to ingrain into the pupil that assortment of habits that shall be most useful to him throughout life. Education is for behavior, and habits are the stuff of which behavior consists.

To quote my earlier book directly, the great thing in all education is to *make our nervous system our ally instead of our enemy*. It is to fund and capitalize our acquisitions, and live at ease upon the interest of the fund. _For this we must make automatic and habitual, as early as possible, as many useful actions as we can_, and as carefully guard against the growing into ways that are likely to be disadvantageous. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work. There is no more miserable human being than one in whom nothing is habitual but indecision, and for whom the lighting of every cigar, the drinking of every cup, the time of rising and going to bed every day, and the beginning of every bit of work are subjects of express volitional deliberation. Full half the time of such a man goes to the deciding or regretting of matters which ought to be so ingrained in him as practically not to exist for his consciousness at all. If there be such daily duties not yet ingrained in any one of my hearers, let him begin this very hour to set the matter right.

In Professor Bain's chapter on 'The Moral Habits' there are some admirable practical remarks laid down. Two great maxims emerge from the treatment. The first is that in the acquisition of a new habit, or the leaving off of an old one, we must take care to *launch ourselves with as strong and decided an initiative as possible*. Accumulate all the possible circumstances which shall reinforce the right motives; put yourself assiduously in conditions that encourage the new way; make engagements incompatible with the old; take a public pledge, if the case allows; in short, envelope your resolution with every aid you know. This will give your new beginning such a momentum that the temptation to break down will not occur as soon as it otherwise might; and every day during which a breakdown is postponed adds to the chances of its not occurring at all.

I remember long ago reading in an Austrian paper the advertisement of a certain Rudolph Somebody, who promised fifty gulden reward to any one who after that date should find him at the wine-shop of Ambrosius So-and-so. 'This I do,' the advertisement continued, 'in consequence of a promise which I have made my wife.' With such a wife, and such an understanding of the way in which to start new habits, it would be safe to stake one's money on Rudolph's ultimate success.

The second maxim is, *Never suffer an exception to occur till the new habit is securely rooted in your life*. Each lapse is like the letting fall of a ball of string which one is carefully winding up: a single slip undoes more than a great many turns will wind again. Continuity of training is the great means of making the nervous system act infallibly right. As Professor Bain says:--

"The peculiarity of the moral habits, contradistinguishing them from the intellectual acquisitions, is the presence of two hostile powers, one to be gradually raised into the ascendant over the other. It is necessary above all things, in such a situation, never to lose a battle. Every gain on the wrong side undoes the effect of many conquests on the right. The essential precaution, therefore, is so to regulate the two opposing powers that the one may have a series of uninterrupted successes, until repetition has fortified it to such a degree as to enable it to cope with the opposition, under any circumstances. This is the theoretically best career of mental progress."

A third maxim may be added to the preceding pair: _Seize the very first possible opportunity to act on every resolution you make, and on every emotional prompting you may experience in the direction of the habits you aspire to gain._ It is not in the moment of their forming, but in the moment of their producing motor effects, that resolves and aspirations communicate the new 'set' to the brain.

No matter how full a reservoir of maxims one may possess, and no matter how good one's sentiments may be, if one have not taken advantage of every concrete opportunity to act, one's character may remain entirely

unaffected for the better. With good intentions, hell proverbially is paved. This is an obvious consequence of the principles I have laid down. A 'character,' as J.S. Mill says, 'is a completely fashioned will'; and a will, in the sense in which he means it, is an aggregate of tendencies to act in a firm and prompt and definite way upon all the principal emergencies of life. A tendency to act only becomes effectively ingrained in us in proportion to the uninterrupted frequency with which the actions actually occur, and the brain 'grows' to their use. When a resolve or a fine glow of feeling is allowed to evaporate without bearing practical fruit, it is worse than a chance lost: it works so as positively to hinder future resolutions and emotions from taking the normal path of discharge. There is no more contemptible type of human character than that of the nerveless sentimentalist and dreamer, who spends his life in a weltering sea of sensibility, but never does a concrete manly deed.

This leads to a fourth maxim. *_Don't preach too much to your pupils or abound in good talk in the abstract_. Lie in wait rather for the practical opportunities, be prompt to seize those as they pass, and thus at one operation get your pupils both to think, to feel, and to do. The strokes of *behavior* are what give the new set to the character, and work the good habits into its organic tissue. Preaching and talking too soon become an ineffectual bore.*

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There is a passage in Darwin's short autobiography which has been often quoted, and which, for the sake of its bearing on our subject of habit, I must now quote again. Darwin says: "Up to the age of thirty or beyond it, poetry of many kinds gave me great pleasure; and even as a schoolboy I took intense delight in Shakespeare, especially in the historical plays. I have also said that pictures formerly gave me considerable, and music very great delight. But now for many years I cannot endure to read a line of poetry. I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me. I have also almost lost my taste for pictures or music.... My mind seems to have become a kind of machine for grinding general laws out of large collections of facts; but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive.... If I had to live my life again, I would have made a rule to read some poetry and listen to some music at least once every week; for perhaps the parts of my brain now atrophied would thus have been kept alive through use. The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature."

We all intend when young to be all that may become a man, before the destroyer cuts us down. We wish and expect to enjoy poetry always, to grow more and more intelligent about pictures and music, to keep in touch with spiritual and religious ideas, and even not to let the greater philosophic thoughts of our time develop quite beyond our view. We mean all this in youth, I say; and yet in how many middle-aged men and women is such an honest and sanguine expectation fulfilled? Surely, in comparatively few; and the laws of habit show us why. Some interest in each of these things arises in everybody at the proper age; but, if not persistently fed with the appropriate matter, instead of growing into a powerful and necessary habit, it atrophies and dies, choked by the rival interests to which the daily food is given. We make ourselves into Darwins in this negative respect by persistently ignoring the essential practical conditions of our case. We say abstractly: "I mean to enjoy poetry, and to absorb a lot of it, of course. I fully intend to keep up my love of music, to read the books that shall give new turns to the thought of my time, to keep my higher spiritual side alive, etc." But we do not attack these things concretely, and we do not begin *_to-day_*. *_We forget that every good that is worth possessing must be paid for in strokes of daily effort. We postpone and postpone, until those smiling possibilities are dead. Whereas ten minutes a day of poetry, of spiritual reading or meditation, and an hour or two a week at music, pictures, or philosophy, provided we began now and suffered no remission, would infallibly give us in due time the fulness of all we desire. By neglecting the necessary concrete labor, by sparing ourselves the little daily tax, we are positively digging the graves of our higher possibilities. This is a point concerning which you teachers might well give a little timely information to your older and more aspiring pupils.*

According as a function receives daily exercise or not, the man becomes a different kind of being in later life. We have lately had a number of accomplished Hindoo visitors at Cambridge, who talked freely of life and philosophy. More than one of them has confided to me that the sight of our faces, all contracted as they are with the habitual American over-intensity and anxiety of expression, and our ungraceful and distorted attitudes when sitting, made on him a very painful impression. "I do not see," said one, "how it is possible for you to live as you do, without a single minute in your day deliberately given to tranquillity and meditation. It is an invariable part of our Hindoo life to retire for at least half an hour daily into silence, to relax our muscles, govern our breathing, and meditate on eternal things. Every Hindoo child is trained to this from a very early age." The good fruits of such a discipline were obvious in the physical repose and lack of tension, and the wonderful smoothness and calmness of facial expression, and imperturbability of manner of these Orientals. I felt that my countrymen were depriving themselves of an essential grace of character. How many American children ever hear it said by parent or teacher, that they should moderate their piercing voices, that they should relax their unused muscles, and as far as possible, when sitting, sit quite still? Not one in a thousand, not one in five thousand! Yet, from its reflex influence on the inner mental states, this ceaseless over-tension, over-motion, and over-expression are working on us grievous national harm.

I beg you teachers to think a little seriously of this matter. Perhaps you can help our rising generation of Americans toward the beginning of a better set of personal ideals.[B]

[B] See the Address on the Gospel of Relaxation, later in this volume.

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To go back now to our general maxims, I may at last, as a fifth and final practical maxim about habits, offer something like this: *_Keep the faculty of effort alive in you by a little gratuitous exercise every day._* That is, be systematically heroic in little unnecessary points, do every day or two something for no other reason than its difficulty, so that, when the hour of dire need draws nigh, it may find you not unnerved and untrained to stand the test. Asceticism of this sort is like the insurance which a man pays on his house and goods. The tax does him no good at the time, and possibly may never bring him a return. But, if the fire *does* come, his having paid it will be his salvation from ruin. So with the man who has daily inured himself to habits of concentrated attention, energetic volition, and self-denial in unnecessary things. He will stand like a tower when everything rocks around him, and his softer fellow-mortals are winnowed like chaff in the blast.

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I have been accused, when talking of the subject of habit, of making old habits appear so strong that the acquiring of new ones, and particularly anything like a sudden reform or conversion, would be made impossible by my doctrine. Of course, this would suffice to condemn the latter; for sudden conversions, however infrequent they may be, unquestionably do occur. But there is no incompatibility between the general laws I have laid down and the most startling sudden alterations in the way of character. New habits *can* be launched, I have expressly said, on condition of there being new stimuli and new excitements. Now life abounds in these, and sometimes they are such critical and revolutionary experiences that they change a man's whole scale of values and system of ideas. In such cases, the old order of his habits will be ruptured; and, if the new motives are lasting, new habits will be formed, and build up in him a new or regenerate 'nature.'

All this kind of fact I fully allow. But the general laws of habit are no wise altered thereby, and the physiological study of mental conditions still remains on the whole the most powerful ally of hortatory ethics. The hell to be endured hereafter, of which theology tells, is no worse than the hell we make for ourselves in this world by habitually fashioning our characters in the wrong way. Could the young but realize how soon they will become mere walking bundles of habits, they would give more heed to their conduct while in the plastic state. We are spinning our own fates, good or evil, and never to be undone. Every smallest stroke of virtue or of vice leaves its never-so-little scar. The drunken Rip Van Winkle, in Jefferson's play, excuses

himself for every fresh dereliction by saying, "I won't count this time!" Well, he may not count it, and a kind Heaven may not count it; but it is being counted none the less. Down among his nerve-cells and fibres the molecules are counting it, registering and storing it up to be used against him when the next temptation comes. Nothing we ever do is, in strict scientific literalness, wiped out.

Of course, this has its good side as well as its bad one. As we become permanent drunkards by so many separate drinks, so we become saints in the moral, and authorities and experts in the practical and scientific spheres, by so many separate acts and hours of work. Let no youth have any anxiety about the upshot of his education, whatever the line of it may be. If he keep faithfully busy each hour of the working day, he may safely leave the final result to itself. He can with perfect certainty count on waking up some fine morning to find himself one of the competent ones of his generation, in whatever pursuit he may have singled out. Silently, between all the details of his business, the *power of judging* in all that class of matter will have built itself up within him as a possession that will never pass away. Young people should know this truth in advance. The ignorance of it has probably engendered more discouragement and faint-heartedness in youths embarking on arduous careers than all other causes put together.

IX. THE ASSOCIATION OF IDEAS

In my last talk, in treating of Habit, I chiefly had in mind our *motor* habits,--habits of external conduct. But our thinking and feeling processes are also largely subject to the law of habit, and one result of this is a phenomenon which you all know under the name of 'the association of ideas.' To that phenomenon I ask you now to turn.

You remember that consciousness is an ever-flowing stream of objects, feelings, and impulsive tendencies. We saw already that its phases or pulses are like so many fields or waves, each field or wave having usually its central point of liveliest attention, in the shape of the most prominent object in our thought, while all around this lies a margin of other objects more dimly realized, together with the margin of emotional and active tendencies which the whole entails. Describing the mind thus in fluid terms, we cling as close as possible to nature. At first sight, it might seem as if, in the fluidity of these successive waves, everything is indeterminate. But inspection shows that each wave has a constitution which can be to some degree explained by the constitution of the waves just passed away. And this relation of the wave to its predecessors is expressed by the two fundamental 'laws of association,' so-called, of which the first is named the Law of Contiguity, the second that of Similarity.

The *Law of Contiguity* tells us that objects thought of in the coming wave are such as in some previous experience were *next* to the objects represented in the wave that is passing away. The vanishing objects were once formerly their neighbors in the mind. When you recite the alphabet or your prayers, or when the sight of an object reminds you of its name, or the name reminds you of the object, it is through the law of contiguity that the terms are suggested to the mind.

The *Law of Similarity* says that, when contiguity fails to describe what happens, the coming objects will prove to *resemble* the going objects, even though the two were never experienced together before. In our 'flights of fancy,' this is frequently the case.

If, arresting ourselves in the flow of reverie, we ask the question, "How came we to be thinking of just this object now?" we can almost always trace its presence to some previous object which has introduced it to the mind, according to one or the other of these laws. The entire routine of our memorized acquisitions, for example, is a consequence of nothing but the Law of Contiguity. The words of a poem, the formulas of trigonometry, the facts of history, the properties of material things, are all known to us as definite systems or groups of objects which cohere in an order fixed by innumerable iterations, and of which any one part reminds us of the others. In dry and prosaic minds, almost all the mental sequences flow along these lines of habitual routine repetition and suggestion.