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HOW TO IMPROVE YOUR MEMORY

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Introduction

INTRODUCTION

Can you remember a dozen instances in which you forgot some thing during the past week?

The answer to that question makes little difference, because you have been forgetting things--little things and big--and if your lapses have been forgotten, so much the worse. But, since you're reading this page right now, it's probable that your forgetfulness has been plaguing you more and more frequently. And you don't know what to do about it. And you're asking me.

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And I'm asking you: Have you tried to figure out why you've been forgetting? Have you noticed when you've failed to remember? Have you noticed what things you've forgotten?

Of course you have got a memory, and unless I'm wrong, it's a pretty good one. If you wanted to take the time, you could sit down and rattle off literally thousands upon thousands of facts ...the "seven-times" table, who's president of the United States, your middle name, if you have one, or, if not, that you haven't got a middle name, the formula for baby's breakfast, what causes hiccoughs, how to spell "hiccoughs," how to cure a rasher of bacon or a rash, how to obtain a writ of mandamus, how long it takes to boil an egg or get to Pittsburgh when traffic's with you ... you've got enough facts in your mind to fill a hundred jumbo filing cabinets!

But for all that you still forgot to bring the car in to have the oil changed last week, your telephone bill sat in a drawer and went three weeks overdue, your secretary had to remind you that it was your wife's birthday, you put your report card down somewhere and then completely forgot where it was ... and you're getting pretty discouraged over this whole memory situation.

Remember this: Unless you learn something--really get it into your mind in tile first place-you're not ever going to remember it! Unless you understand something the first time, the odds are that the next time will be just another first time.

Trace the thought back a step further, and consider this: Unless you pay attention, you probably will not learn. And another step--unless you're interested for one reason or another, you won't be paying attention.

So you're not going to remember anything in which you don't take an interest upon first encounter.

Of course it's obvious that you must often rely upon your memory to bring you information about things which don't interest you. If you've been asked by the lady next door to pick up a quart of milk on your way home, maybe you don't care whether she drinks her coffee black or not; suppose you don't like your job, or school, or cleaning the house ... these are responsibilities which you've got to meet. Even if you're not genuinely interested in some things, you've got an interest in them, right?

So: since the best way to remember things is to take an interest in them, and since you've sometimes got to remember things about things in which you're not ordinarily very interested ... what's the answer? Create an interest in them!

--Ah, come on, how do you expect me to get interested in addressing two hundred envelopes, or putting out the garbage, or algebra?

Simpler than you think! Get interested in exercising your

memory muscles! Make your memory your hobby, watch it work, teach it new tricks, carry it around with you and show it off, and pretty soon it'll be taking fine care of itself!

In the following chapters I'm going to suggest a few of the tricks that you can play with your memory, in order that many of the things you've been forgetting will become more fun to remember. At the same time, you'll begin to realize that some things aren't worth the time and effort it would take to commit them to memory, if they can be taken care of in some easier way; part of this book will be devoted to a number of memory-minimizers-suggestions for avoiding memory tasks which might cost a bit too much of your time.

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It won't be a system, or a course, or just a book of puzzles to test your rote powers ...but a discourse on the practical application of memory principles. And as you learn more about your own memory, you'll take a greater interest in it, and use it to better advantage. The results of all this will be evident almost immediately--in your daily life.

After a very short while, you'll start to get the hang of it yourself. And as you become more familiar with your memory you'll derive pleasure and satisfaction from the game of finding new ways to strengthen--and reinforce your memory.

MEMORY FACETS

Memory is far and away the most remarkable of all your mental functions. Were your mind unable to store up an enormous part of all the information fed it by your senses, each new moment of existence would bring with it the necessity of "starting from scratch" in everything you think and do. You'd have to wear a little tag with your name on it, on the chance you might meet someone to whom you'd like to introduce yourself; every time you picked up a book you'd have to examine it to see how the pages turned ... and you wouldn't be able to read it anyway, because the letters and words would be meaningless to you!

Everything you do is made easier for you by your memory ... each activity is simpler because in the past you've had experiences which told your mind and body what to expect and how to act in certain situations. Your life is a continuous lesson, because the countless things you do prepare you for doing them again ... because experience eliminates travel on the trial-and-error route by teaching you the right or wrong way.

Even if you were to leave your memory completely alone, without ever giving a thought to using it more efficiently, it would continue to serve you loyally and well ... but, why settle for a meager pension when, by investing just a bit of consideration, you can reap a vast fortune? While attending a lecture you're sure to pick up a few tidbits of information, just in hearing the words.

But if you could know how to prepare all those facts for more efficient remembering, if you were able to multiply your chances of remembering tile information, think of how much more knowledge you'd be able to absorb!

The first step toward strengthening your memory is to find out exactly what it is. There's much more to it than a bunch of assorted facts and ideas swimming around in the gray matter of your brain ...as you'll discover when you read tire next few pages.

Your Entire Memory

It should be made clear, right about now, that in this book the term "memory" means more than merely the mind's retentive abilities: it means, to freely adapt the dictionary's assertion, all means by which one can recall or make available to tongue-tip any information or knowledge one feels like using. This will include every trick, gimmick and short cut that we can devise; anything we can do to avoid being caught in the mental cold.

Suppose we take a look now at your memory's total make-up ... for our purposes, its parts can be classified into two basic categories: "natural" memory, or your own mind's function

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of remembering, and "artificial" memory--devices for retaining information outside the framework of your mind.

All In The Mind

Your natural memory is the result of an exceedingly intricate network of retention of facts, ideas, and physical activity--all of which are learned through sensory perception, and then stored in your mind and limitlessly cross-referenced, for future use. This is how it happens:

Facts

"Camembert just had six kittens." That sentence tells you, first of all, the fact that six kittens have begun to exist. It also reveals, in the word "just," the fact that their birth was quite recent. But, because of your mind's retention of other facts, previously learned, the sentence tells you even more-you know that Camembert is a cat, and that the kittens are her offspring, and that she is a lady cat. You know these things because of your previous knowledge that kittens--baby cats-are descended from female cats... information which comes from your mind's ability to register facts.

Abstract Ideas

Now, what is a cat? Can you picture one in your mind? Unless you know Camembert, your impression of "cat" will probably not be an accurate picture of Camembert herself ... but still, you have a very good idea of her basic parts, at least. This impression is the image of an abstract idea, one built on a whole slew of impressions in your past involving cats and cat-ness. Then, too, how many are "six"? One more than you have toes on a foot, three and three, one less than days in a week, half-a-dozen... another abstract idea that is so well documented in your mind that you need give the word- and the concept- no more thought than it takes you to think of what letter follows "G" in the alphabet.

Motor activity

If you swim, or ride a bicycle, or climb up a step ladder to get things off a high shelf, or move you arm to avoid putting your hand into flame, or walk, I'm sure that you don't spend every active moment thinking about these things; they come to you so naturally that you don't even have to give them thought. If you type, no doubt you can now type many more words in a minute than was the case the very first time you tried a typewriter. But that took time and practice. Through repeated experience, effort and practice, your mind comes to retain memory of motor activity.

But all this mental memory-activity is only a part of the total picture. Remember, our definition of memory plainly calls for all means of making information available.

Your artificial memory

Even if you were going to be able to devote full time to the task of feeding your natural memory's supply of information, you couldn't possibly begin to nourish it nearly enough to satisfy your needs. When you come right down to it, you simply haven't got the time to remember all of the things you need to know every now and then. It doesn't pay to

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memorize the entire San Francisco telephone directory on the chance that you'll one day have occasion to call someone then ... when you need to, you can always look the number up. And when the time comes that you must call someone in San Francisco, the directory becomes a device for reinforcing your natural memory.

Few people can awaken themselves automatically each morning at specifically desired times, unless waking time remains constant (waking then becomes a habit, as long as retiring time is constant). But if you usually wake up at 8:00, and on one special morning you must rise at 7:00, you've got to rely upon outside assistance--an alarm clock. This is a device.

Suppose you have approximately 100 accounts in your sales

territory, or 100 members in the club of which you're secretary, or 100 relatives and friends to whom you must send wedding invitations. If you've come to know them gradually, one or two at a time over a period of years, the odds are that you remember the addresses of most of them, or at least of those to whom you write most frequently. But what if you take over a new territory, what if you join a new club, what if you take on the task of sending invitations to the guests of the groom? You couldn't possibly expect to remember all those new names and addresses right off, and it really wouldn't pay to set yourself to the task of memorizing them at the first possible moment, for, to make their recall habitual would be quite a difficult and time-consuming undertaking. So you condense the task in a very simple way: you prepare your own little address book, writing in it the names and addresses that you need. When you no longer require the bundle of information which it contains, you can put it away; or, if the information is continually needed, you simply make a habit of carrying it with you, or keeping it convenient. That book, too, is a device.

Do you get the picture? First, your mind is able to feed your memory directly--ideas, facts and motor information (physical activity)--from its own storehouse of knowledge. Because your memory is serviced by the mind alone in such cases, we refer to this activity as your natural memory.

And when your mind is unable to furnish the information which you seek, you can aid your natural memory with external devices: your alarm clock is such a device; so are your address book, your shopping list, the dictionary, your wristwatch, timetables, cookbooks, the letters on the typewriter's keyboard whenever you have to look, etc. All of this we call your artificial memory.

Memory-minimizers

All sources of information--your own perceptions, books and newspapers, people, and in fact nearly every single thing with which you come in contact--can both supply information to your natural memory, and perform as artificial memory-minimizers. Why should you bother to memorize the population figures of Bechuanaland, when the almanac is right on your book shelf? No need to memorize travel directions you'll need only once, when one of the passengers in your car can tell you what turns to make while you're driving there.

But when the information you want to make available is of so specialized a nature that no standard reference works or handy authorities are at your service, you'll want to contrive memory-minimizers that are precisely suited to your needs. For instance, the salesman's address book; the student's lecture notes and class schedule; the housewife's clippings of favorite recipes.

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Memorize or Minimize

Whether you're going to memorize a specific thing, or merely keep it available for easy reference by means of artificial devices, is of course up to you. Let frequency of use, importance, degree of actual interest, and so forth, guide you in deciding. But don't forget, it's very important that your external storehouse be accessible, and even in occasional command of your attention, lest you forget to remind yourself. No sense in preparing a valuable memory-minimizer, only to misplace it and its usefulness. If you use an appointment book, refer to it regularly, at regularly scheduled times; always keep reminder notes dealing with the subject in the same place.

By organizing your time to use your natural memory only for those things for which you require mental remembering, and taking care of the unnecessary-to-memorize in an efficient manner, you'll be able to cut your task in half with surprisingly little bother. By eliminating the chore of committing many little needed things to mental memory, you leave your mind more free of interference; uncluttered and clear and with more time for all those other things that you'll want to have right with you at all times.

Memory Tricks

Your life is touched by a never-ending barrage of sensory impressions-a continuous attack

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by countless little "sense-arrows," which invade your body through eyes and ears, mouth, nose and fingertips...all over you! These impressions crash the gates and head straight for your brain, there to be sorted and filed for future reference.

As you read this page, vision sensarrows are carrying its message to your brain; and because your mind is aware of your overall general goal, everything is being filed under the heading of "memory" ... "making mine better." That, then, is your target: success at gathering information about the psychological aspects of memory, and utilizing it to strengthen your own ability to remember. Or, turning the minds own habits to your practical advantage, much like a matador studies the bull's style of charging and turning, and then uses this knowledge to help him turn in a better performance during the corrida.

A helpful image

To better visualize several of the basic aspects of your memory's "style" try this: imagine your sensarrows to be solid things; some will be larger than others, thus less difficult to locate in your mental filing cabinet. Then, too, should several arrows bunch together, the resulting cluster would be much easier to find then a lone and lonely arrow.

Using this image as a starting-point, let's begin to analyze your mind's memory habits, and see if they don't afford a few suggestions for strengthening your ability to remember.

Opening the drawer

Before those sensarrows can get into your mental filing cabinet, you've got to open the drawer. Let your sesame be the words, "I want to remember, I can remember, I shall remember!" As important as knowing the best ways to go about strengthening your retentive ability is your attitude. If you're convinced before you start that nothing's going to help, then you're absolutely right, even though you're dead wrong. The doubts that you have will always be present in your conscious thoughts, leaving no room for practical memories.

But an optimistic outlook clears the rocks from the road at the outset! If you're confident that you can reach your goal, the route will be fun, and everyone knows that fun is more fun than work! When you come to a hill, a difficult part of making your memory better, just making believe that it's fun will make it a lot easier!

Experiments have demonstrated that people generally retain memory of pleasant things more accurately, and for a longer time, than memory of unhappiness. So it follows, doesn't it, that by being an optimist to begin with, your memory is automatically a great deal better?

The Value of Attention

Suppose you're sitting in your parlor playing checkers, and in the next room the radio's on and a news commentator is speaking in a resonant voice about:

the latest U.S. satellite attempts;

a flood in Brazil;

A Lithuanian poet who won the Nobel Prize;

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the day's World Series game;

newest developments in women's fashions;

stock market activity;

the weather forecast.

From time to time something which the commentator says will cause you to perk up your ears and listen more carefully, because he's speaking about a subject which interests you. If your fashion-conscious, you'll certainly want to hear about the clothes you'll be wearing next season. If you're a baseball fan. You'll be listening when he announces the score of the game. If you've planned a fishing trip for the next day, you'll be curious about what the weather's going to be like.

And the news items to which you pay closer attention will make deeper impressions upon your memory. Do you know who won the World Series last year? Who won the Nobel Prize? What was the high close of IBM stock last December?

Well attended impressions are large sensarrows; they can be more easily located in your memory, and are easier to remember.

Motivation for paying attention

What are the conditions which enable you, or force you, to give your attention to one thing, and not the other?

It has already been stated that a vital part of paying attention is interest. Now, the interest that I'm talking about doesn't have to be that genuine desire to know more about whatever it is you're trying to concentrate on, for its own sake; but, speaking in broadest terms, it refers to your motivation- any reason which you have for knowing or remembering.

And every reason that you could possibly have is one either of reward, or avoidance of punishment. Actually, both are pretty much the same: reward is a profit, while avoidance of punishment is a zero--better than a minus.

If you're genuinely curious about something, you desire to reward yourself with additional information about it. If you stand to make money by remembering more about the things you're selling, cash is your reward motive. If you want people to think highly of you for being able to intelligently discuss current events, or popular novels, or history, or anything...if you want people to think more of you for your remembering their names, or playing chess well, or reciting poetry, or telling funny stories, social acceptance is the reward you seek.

If you want to avoid the discomfort of having flunked your geometry course, or the displeasure of having forgotten to keep a promise, or the annoyance over having forgotten the main theme of the third movement of the Symphonie Fantastique, your reward will be the maintenance of security ... avoidance of self or social dissatisfaction. You are trying to avoid jeopardizing your chances of winning the reward of social acceptance.

Generally, the stronger your motive for remembering something, the greater an interest you'll take in it, and, consequently, the better your attention will be. And, when you pay attention, you stand a better chance of remembering!

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Now... precisely what are the circumstances which act as motivations for remembering, and how do they do it?

Impulsive curiosity

Impulsive curiosity is that trail which induces you to take a second look, or to try to find out more about something, because you can't quite believe what you saw or heard the first time. The surprise, the exaggeration, the intense, the unusual...these things provide vivid impressions--large sensarrows. Someone swims across the English Channel. A woman's hat contains a live bird in a cage. A new species of animal is discovered. You meet a man who's nine feet tall. You smell garlic for the first time. You see a building constructed entirely of glass.

Curiosity out of familiarity

Curiosity inspires you to want to know more about something, after a little information, or even a lot, has aroused your genuine interest. Your hobby, your country, celebrities, a member of your family, something about which you don't fully understand, and would like to ... these things, and countless others like them play familiar roles in your everyday life. When someone begins to speak about something and you recognize what it is he's speaking about, your personal pride and ego will focus your attention upon it, so that you might learn even more about it.

Competitive nature

Man instinctively likes to win--arguments, athletic contests, fights, games ... his ego is satisfied when, after pitting his mind, or his body, or both, against other men, nature, or his own past performances, he comes in first. If you bring yourself to believe that you might become an excellent card player, your chances of remembering the rules and the finer points of play increase tremendously, because your motive is inborn, and your goal appears close enough to induce you to reach out for it. If you won a spelling bee in the fourth grade, chances are that you'll forever take pride in your superiority at spelling, and consequently will remember how to spell difficult words with comparative ease. All this ties in with ego, and desire for social approval.

Money, fame, possessions

The cash profit is a powerful motivation indeed. The contestant on a quiz show will show an amazing command of knowledge about the subject which can win for him security, the luxuries he has always sought, the fulfillment that comes of being revered by many people. The commission incentive endows salesmen with the drive to remember enormous gobs of information, from names of customers to the smallest factual details about products.

And so forth ... motivation, based on desire for reward or fear of loss, inspires attentiveness, which in turn produces strong memories. When you open the filing cabinet drawer, when you prepare your mind to receive information, the sensarrows come pouring in from whatever direction your sights are focused on.

Once you have directed your interests, factors involving the nature of the sensarrows, in regard to their relation to other sensarrows, come into play. ...

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Association

When an impression reminds you of other past impressions, it hangs in your conscious observation for just a little tiny bit longer, and then becomes a stronger memory. Suppose you see a picture of the flag of Iran. You might notice at the time that its colors are the same as the colors of the Italian flag, which you remember because the Italian family living next door always dresses up the house for Christmas in red and green. Or, maybe those colors are in your drapes. Or perhaps as a painter or printer your work involves colors, and you're reminded by the Iranian flag that red and green can be mixed to produce a deep brown. Or maybe your name is George W. Randall, and your initials tell the colors, top to bottom--green, white, red.

Remember, your mind is elaborately cross-referenced and any sensory impression is just as likely to touch off a reminiscence of something seemingly unrelated, as one of something which is closely allied. And with every association the memory of an impression is reinforced that much more. One may conclude from this, therefore, that the more you know, the easier it becomes to remember.

Association is the fundamental principle behind every artificial "system" for strengthening memory. Here, very briefly, is how it works: By constructing your own list of things with which to associate, you can remember any other things that come along, simply by connecting the thing to be remembered with the appropriate thing from your artificial list. Then, by mentally thumbing through your list, you will be reminded of the thing you're trying to remember when you come to its partner. More about this very important part of memory improvement later.

Pattern

Your mind tends to organize the impressions it receives, and to reduce them to simple formulas wherever possible. This saves it, and you, a lot of trouble, because the knowledge that something fits into a certain pattern gives you a head-start in trying to remember it.

The Arabic numeral system, which is the one we commonly use, is actually little more than an ever-continuing repetition of ten digits--0, 1, 2, 3, 4, 5, 6, 7, 8, and 9--in a never-changing order. Perhaps you've never counted as high as 355,966 ... but you know as well as I do that the number which follows it is 355,967. That's because you know that seven follows six, in the system's repeating and repeating pattern.

How does this tendency toward pattern act upon your ability to remember? Well, for one

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thing, rhyming lines of poetry are more easily memorized than are sentences of prose. Words are easier to memorize than nonsense syllables. Sentences am easier to memorize than groups of unrelated words. Try naming all the letters of the alphabet, stating them at random without relying on the order in which you've learned them!

Furthermore, you'll find that it's easier to remember things in groups than singly, and less difficult to memorize lists when they are placed in alphabetical order, or in size place, or chronologically, or in any established pattern that will lend itself to your list.

Sensarrow clusters

Remember those clusters of sensarrows that are so much easier to locate in your memory than lone impressions? We've already mentioned one way in which they're formed-association. The more you know about a subject, the easier it is to recall specific things about it, because each specific thing is hooked up to other sensarrows

Pattern also plays an important part in this means of remembering by association: visualize your total knowledge of a subject as a sort of jigsaw puzzle, and think of each isolated bit of information about it as one of the parts. When you receive an impression from that part, you recognize it as part of the entire picture, and associate it with the overall subject, while at the same time classifying it in the pattern which is formed.

More than one sense

Now we come to still another method by which your mind brings into existence those easy-to-locate sensarrow clusters. When you see an apple, a little vision sensarrow is discharged to your brain. When you smell the apple, an olfactory sensarrow shoots out at your nose. When you pick up the apple and take a bite out of it, touch and taste sensarrows join the others in your brain. Even the sound of the crunch as you bite down on the apple produces another impression by which you can identify the apple you're eating. So appleness can be identified by the sum of all the impressions which you've received: a round, red, shiny thing that smells and tastes such-and-such a way, and makes a crunching sound when you bite it. The entire experience leaves a much more vivid impression with you than would just a look at an apple!

Repetition

Here's another supposition to suppose: You've found a brand new way to travel to school, or to work, or to the market. All you've got to do is walk two short blocks east and catch a bus that you never even knew about, until the people next door told you. (When they mentioned it, you paid attention because you were motivated by a desire to discover a better way to gel where you're going.)

You walk the two blocks east the next chance you get, wait at the corner for the bus, and discover that it is indeed a very nice way to get to where you're going. You decide that you'll travel that way from now on. So, each day you walk those two blocks and take that bus.

The first time you take the walk, you look around you and notice the houses, the trees, the store windows, the sidewalks, and everything else. But you don't really remember most of it. The next time you make the trip the same sensarrows as last time pop out at you. And the next time, and the next time, and the next time. Pretty soon, you know everything about that route "by heart," and all because you've been exposed to it over and over. The sensarrow which you received yesterday from the elm tree in front of the third house from the corner has piled itself on top of the sensarrow which you got from the same thing the

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day before, and the day before that. Repetition of the same impression anchors the impression firmly in your memory.

This is the principle of memory which helps you to learn by studying. When you want to make sure you can understand something and remember it well, you repeat it to yourself, again and again. Of course the number of repetitions necessary to commit the thing to memory will vary with variations in all the other elements that determine the size of the sensarrows. After all, if the sensarrows are fairly large, it takes comparatively few of them to build a visible cluster!

Overlearning

You can, by studying a thing for a certain amount of time, commit it to memory well enough so that you can recite it backwards and forwards, inside out and upside-down...well enough so that you really know it quite well--and still forget it a day later. This is because your retention "runs out of gas"--you haven't overlearned. Overlearning imparts longevity to your memories far and away out of proportion to the degree to which you practice it. As soon as you're sure you've got it, it's good practice to put in another half hour on it, to increase the life of your memory by weeks, months, years!

Interference

Just as a radio program comes through to you better when no static disturbs your radio's reception ... just as you can hear the music better when there's no dust on the phonograph needle; .. just as the contents of a speech are better understood when there aren't any boisterous hecklers distracting your attention ... so your mind retains its memories more effectively in the absence of other activity on the same wave-length.

Consider these alternate situations:

A. You begin at 1:00 in the afternoon to memorize a bunch of facts about the Revolutionary Period in American History. By 3:34 you decide that you've got the material pretty well learned, so you hop off to the movies for a change-of-pace. After five hours of first the Alamo and then the Civil War, you return to your room to refresh your previous learning. But all that stuff about Texan independence, and those Civil War dates and data, have somehow gotten confused in your memory with Valley Forge, Bunker Hill and Saratoga. Before you're through re-learning the Revolutionary War, you've spent another two hours!

B. At 1:00 you get down to studying the Revolutionary War, and decide at 3:30 that you know your stuff. Then, for a cliange-of-pace, you go outside and get into a baseball game. While you're standing around in the outfiels, your mind reviews what it's just learned, and there aren't any new facts and dates to confuse you. So when you return to your room to review, you find that just about twenty minutes of study are sufficient.

Interference by material which is in any way similar to the things you've memorized, confuses your memories. After a session with the roster of your customers, visit old friends, rather than going to a party full of strangers. After memorizing your speech for the PTA, bake a cake instead of reading that book you've been saving. This principle is an important one to keep in mind when you read about spaced learning-combining study with "strategic" rest periods.

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When forgetting occurs

It's a funny thing. . . you forget the greatest part of the material which you are going to forget, very shortly after you've learned it. The graph of your memory curve takes a sharp downward turn almost the second you stop memorizing, than gradually levels off as time goes by. Suppose you memorize 100 words of a foreign language vocabulary list today. Depending on how well you've done your work, you might remember anywhere from none to all of it, tomorrow. But, assuming that you've done a pretty fair job, let's say that tomorrow you still retain memory of fifty words. On the next day, you might remember forty, then 35, then down to thirty words, which you'll remember for quite some time.

Now, if tomorrow you re-study the fifty words you've forgotten, by the next day you might know about 70 of the original 100.

And if you then study the 30 you've forgotten, you'll bring your knowledge of the vocabulary up to a pretty high level.

The important thing to remember is that the sooner you can review something you've memorized, the better off you'll be, since your memory from original study will be fresher, and therefore much fuller. Perhaps this is why spaced learning-the next factor we'll discussis so effective ... it provides a deterrent to rapid memory fade-out.

Spaced learning

If you spend an hour at study, then fifteen minutes at a "break," another hour at your work, another break, and another hour of study, you will have learned more, and memory of the learning will last longer, than if you spend three or even four--straight hours at work.

Perhaps this is due to the reverie in which you are bound to indulge during the break period, reasoning out in your own thoughts the things you've been memorizing. Or, perhaps your mind simply begins to wander when you press it for too long periods of time. At any rate, spaced learning really does work ... try it. Studying for several short periods of time, with intervals of relaxation, generally produces longer-lasting memories than does one long,

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intensified study period.

Fringe benefits of spaced learning

A peculiar trick which your mind occasionally plays is remembering more of something some time after memorizing it, than very shortly after completion of the memory task. This seems to be a direct contradiction of the memory curve, but it's a very specialized case. Soon after you've completed a turn at the books, you'll be able to remember a certain portion of the material you've covered, right? But, a few hours, or a day later, when you've spent a little time thinking about the subject, a few points which might have slipped your immediate memory will come to your attention through pattern and association with the related points which you have been able to remember. So, in effect, you are remembering a little bit more than you actually learned at the time of study. This phenomenon might be a delayed memory of the "forgotten" material's actual position on the page, or a belated understanding of the words which at first you failed to understand, but later found rational in the light of your thinking about the entire subject.

Dredging for lost memory

Often a name you've forgotten, or a fact that you tried to remember but couldn't, can be brought into your memory's focus through reverie ... think the thing you've forgotten-remind yourself of every point you can which may bear an association with it. It's easier to remember things that are meaningful to you, through their relation to other things you know.

Imagination

When you remember the name of a friend, or the appearance of a house, or the color of a flower, you are utilizing your memory of past impressions. But when you think of your friend growing flowers in front of a particular house, despite the fact that he doesn't even live there, and despite the fact that you've never known him to be interested in gardening ... you're employing your imagination. This is active use of the memories which you have passively collected.

Sometimes your imagination plays tricks on you, however. Have you ever walked into a room and gotten the powerful impression that you had been there before? I'm sure that you've experienced this "false memory" at one time or another ... you can't help feeling that you've heard a song before, you're sure you know that face, why can't you remember when it was that you spoke about that subject in the past. Well, it's quite likely that you never did do any of those things, although you might have heard a similar tune, or discussed something related. Sometimes an impression will touch off a great number of isolated associations in your mind, creating the composite image of the new impression so vividly that you can't help wondering...but don't worry about it--it happens to everyone. Just try hard to avoid confusion between false and real memories.

Your mind's got quite a "personality," hasn't it? And now that you know it a little better, you're ready to analyze what you've learned about it in the light of strengthening your memory, and see what possibilities you've uncovered for turning its ways to your advantage.