Faster: The Acceleration of Just About Everything Study Guide

Faster: The Acceleration of Just About Everything by James Gleick

Contents

Plot Summary

"Faster: The Acceleration of Just About Everything" by James Gleick begins with this quote, "You are in the Directorate of Time. Naturally, you are running late." (Chapter 1, p. 3).

Author James Gleick introduces the Directorate of Time, Gernot Winkler, and the existence of the plethora of atomic clocks based atop a hill near the Potomac River. The clocks are exquisitely precise and to ensure their precision. Each clock is synchronized and compared to many others. Gleick talks about a time when people relied on the revolving earth to tell time and were happy with the result. That is no longer true.

"Through most of history, time was fixed by astronomical reference points - the Earth spins once, call it a day. No more. The absolute reference as shifted from the stars to the atomic beams in their vaults. Particles are steadier than planets. Never mind the uncertainty principle it is the heavens that cannot be relied on." (Chapter 1, p. 4)>

Author James Gleick presents material in a straightforward manner. Gleick manages, in his humorous and plain language, to describe the scientific principals of time without overwhelming the reader. The author points out the ridiculousness of some of the things people do to save time or how it is wasted.

One of the main themes in the book is acceleration. Valuing or overvaluing time causes people to want to do more things and to do them faster. Multitasking is a way of life for most people. Many eat while watching TV, talk to the kids, or listen to audio books while driving or attempt to learn a foreign language during sleeping hours. In fact, the more people do, the more people want to do. Unfortunately, this often causes stress because people begin to compare themselves to others and believe that they could be doing more and more more.

Gleick discuss various types of accelerants. The knowledge and understanding the concept of time works as an accelerant. There are others, namely amphetamines and caffeine. Methamphetamine is a popular drug and is among several that have coined the use of the term "speed." Speed has become a metaphor within a metaphor and people automatically relate the concept to something that's "on speed." "Rush" is also a metaphor and is so popular that it is used in ad campaigns for caffeinated drinks.

With acceleration comes a loss of leisure time, appreciation for things that take concentration such as classical music.

Various topics are included in the book including the birth of the Industrial Revolution and the advent of the "time is money" philosophy. Modern conveniences, fast food, and multitasking are discussed at length and how the activities of the population have changed dramatically in just one generation. People tend to want to do more and to do it faster than ever before. However, there is a price to pay for all of this speed - primarily,

a loss of leisure time and enjoyment as well as the physical and psychological ailments that come along with living at a high rate of speed.

chapters 1-7

chapters 1-7 Summary and Analysis

Chapter 1 opens with this quote: "You are in the Directorate of Time. Naturally, you are running late." (Chapter 1, p. 3).

Gleick discusses the Directorate of Time and the existence of the plethora of atomic clocks based atop a hill near the Potomac River. The clocks are exquisitely precise and to ensure their precision, each is synchronized and compared to many others.

Gleick talks about a time when people relied on the revolving earth to tell time and were happy with the result. That is no longer true.

"Through most of history, time was fixed by astronomical reference points - the Earth spins once, call it a day. No more. The absolute reference as shifted from the stars to the atomic beams in their vaults. Particles are steadier than planets. Never mind the uncertainty principle it is the heavens that cannot be relied on." (Chapter 1, p. 4).

Gernot M. R. Winkler, the director of the Directorate of Time, discusses the development of the real second and how we as a society demand to be exact. This is a far cry from the first time the Lilliputians saw Gulliver's watch and referred to it as a wonderful machine. Now society works in milliseconds and beyond.

Unfortunately, modern conveniences and time saving devices have caused society to become obsessed with time, so much so that every second seems to count even when it may not truly matter. Gleick talks about those that push the "door close" button on an elevator because they cannot bear to wait ten seconds for the doors to close; people that insist on using speed dial because punching in numbers takes too long; or those that flip through channels at lightning speed to avoid commercials or to get as much information in as short a time as possible.

It is noted however that society does not make use of the time saved for leisure purposes. Instead, people cram more into each day and still cannot find enough time to do everything. Gleick insists those that do not understand time are bound to be ruled by it.

In Chapter 2, Gleick discusses Type A personalities. Everyone knows about Type A personalities. They are the ultra impatient. They suffer from stress and anxiety. They are the ones that push the "door close" button. Unfortunately, they also share common diseases and ailments shared by no other group - ulcers, heart attacks, and more.

Gleick talks about one such person. Paul is a man that suffers from "hurry sickness." Paul's doctors diagnosed him as such:

"A very disproportionate amount of his emotional energy is consumed in a struggling against the normal constraints of time. 'How can I move faster, and do more and more things in less and less time?' is the question that never ceases to torment him." (Chapter 2, p. 16).

Gleick talks about the validity and the falseness of the reports issued in the late 1950s regarding physical ailments and trauma caused by the Type A personality.

In Chapter 3, Gleick discusses the Door Close Button. The Door Close Button is a classic issue for Type A personalities. These personalities simply do not like to wait. The problem with elevators is that the higher the building, the more elevators are needed. Architects find trouble in providing enough space for banks of elevators without creating buildings that look to have been designed by M.C. Escher.

One thing that the Type As do not know - pushing the door close button does nothing under normal operation. It merely allows the button pusher to think that something is going to happen. The same can be said for pushing buttons that are already lit. It changes nothing.

"The computers could instruct elevators to give preference to floors with many calls. But elevator engineers know better than to provide any greater incentive than already exists for repeated pressing of the button. They remember Pavlov. They know what happens to those dogs." (Chapter 3, p. 30).

In Chapter 4, Gleick discusses the obsession with watches, referring to the watch face as a person's other face. Gleick discusses the progression of the watch industry from the beginnings of making simple timepieces to pieces of equipment that tell time, play music, glow in the dark, use GPS systems, feature alarm clocks, and can give mathematical answers and calculate time zones. Modern watches can do practically everything.

The forward motion of watch companies is reviewed. However, as accurate as watches have become, J.T. Fraser says that they still cannot predict if the next second will come.

In Chapter 5, at one time there was no such thing as standard time. However, sailors and navigators needed some benchmark to determine longitude out on the open sea. Knowing the time in Greenwich meant knowing longitude. However, there were thousands of local times across the United States alone which made an international standard time nearly impossible. The advent of the railroad changed that as it demanded specific standardized time to be able to be on time for its stops. This was not a welcome thing for the people of the 19th century. It created time zones, daylight savings time, and a lot of confusion. It was also profitable for some. In 1928, the New York Telephone Company and New Jersey Bell Telephone Company created "Time Bureaus." People could call Meridian 1212 to receive the correct time for a cost of five cents. On the very first day, 10,246 people used the service.

In Chapter 6, the knowledge and understanding the concept of time works as an accelerant. There are others, namely amphetamines and caffeine. Methamphetamine is

a popular drug and is among several that have coined the use of the term "speed." Speed has become a metaphor within a metaphor and people automatically relate the concept to something that's "on speed." "Rush" is also a metaphor and is so popular that it is used in ad campaigns for caffeinated drinks.

Caffeine is promoted as one's friend, giving that "rush" of energy. However, it can also cause many negative effects.

Gleick also addresses the use of the word "soon" and finds it to be a word that lacks definition as there is no concrete measurement.

In Chapter 7, speed has become such an ingrained part of the world that it often takes special effort to see how things actually operate. To do so, many scientists and researchers have taken to using cameras to film specific events and then watch them in slow motion to understand how things work. The best example is the question of how running horses move. Some believe all four hooves leave the ground at once while others believe the opposite is true. It turns out that both are right and wrong, depending on the state of the horse's speed.

chapters 8-15

chapters 8-15 Summary and Analysis

In Chapter 8, Gleick discusses the concept of "real time." Real time was invented in the 1950s when computers first came into use. Until that point, computers were deemed to be useless because they were not powerful enough, i.e. fast enough, to keep up with how fast the date could be fed into them. Therefore, the concept of real time was born. Gleick jokes that he wonders what existed before - imaginary time? Unreal time? The term has become so ingrained in society that it is often used in a redundant fashion, e.g., "in real time as we speak." Real time actually has little, if anything to do with time at all.

The concept of real time is firmly ingrained with the internet as well. People want everything faster and technology must keep up.

In Chapter 9, before the internet existed, hardware manufacturers had to work frantically to keep up with advancements. Gordon Moore, referred to as the semiconductor pioneer, predicted that chip density and therefore computing power, would double every 18 months. Moore was on targets. Acceleration of production and improvements came faster on an exponential scale. Compare this to other technological feats such as the printing press and telephone.

Gleick talks about the 1965 show "Lost in Space" including how it was filmed and the amazing advancements in photography, film and the space program. There is also the issue that people cannot keep up with the rapid pace of technology because we do not have the time to learn to use all of the new equipment and processes.

In Chapter 10, Gleick talks about the egg salesman that begins to buckle under the pressure of his own invention - the placement of the button on his computer that allows people to send messages that in turn make his wristwatch beep. The merchant celebrates and laments the days when he had to physically go to see his customers. Now, he never sees them but they do talk via the internet.

"For so many people and businesses, speed is connectivity. The state of being connected makes them more efficient - maybe even more nimble. Sadly, it also makes them feel busier - maybe even overloaded." (Chapter 10, p. 84).

Gleick talks about speed and how it is used in business, via the internet and priority services like FedEx. Operations such as police stations, newspapers and stock brokerages worked just fine before the introduction of this connectivity but one often wonders how.

"The great instrument of connectedness was, of course, the telephone, transforming the century end to end." (Chapter 10, p. 85).

The existence of the speed, perhaps even the internet, has caused a glut, particularly in the media. The more people hear, the more they want. The more they want, the more the journalists have to struggle to produce material fast.

However, the more information people have, the less one pays attention to it. If a person receives only one message, the person is likely to read that message and consider its contents. If a person receives a hundred messages, there are a great many that will never be read.

In Chapter 11, Gleick discusses opinion polls. During President George H.W. Bush's State of the Union Addresses in 1992, CBS News held a live call in opinion poll. Approximately 1% of callers got through. Gleick states that forming an opinion is one process; stating it is another. Perhaps people need to learn to do one at a time until the process is complete.

In addition to terms such as time-sharing, real time and multitasking comes "race condition." Gleick refers to it as being "an especially insidious symptom of fast living and sensitive timing." (Chapter 11, p. 95).

The race condition is created when a series of processes, meant to operate in a certain order, fall out of sync. This problem occurs in a process without computers more often than not. Gleick talks about opinion polling and how pollsters expect people to give opinions immediately before the opinion is even processed.

The term "sound bite" is also reviewed. Gleick talks about how people - from newscasters to business executives and beyond - learn to talk in clipped phrases that can be blasted out to the world at large. It is, in a way, a synopsis that has been created by the need for speed.

"We are bumping against a speed limit. We can take real time communication only so far - at least until humanity becomes a single organism with parts conjoined as a light-speed consciousness." (Chapter 11, p. 100).

In Chapter 12, no matter how fast one tries to hurry some things along, it just is not possible. Gleick refers to composting and how the process takes how long it takes. No matter how ambitious or anxious a person is, food and other natural items decompose at a specific rate, whether or not people want to wait for it to happen.

People no longer build businesses with the thought of creating a family legacy. Consumers buy pre-washed jeans because it takes too long to get that faded look. Jet lag may be one of the best examples of this as the body can only adjust so quickly to time changes and transportation.

However, biology manages to fight back. Pauses are inserted into people's lives whether or not they want them.

Chapter 13 begins: "From a cosmic point of view, the velocity of human thought is more or less fixed - attuned in sometimes useful ways to the velocity of an apple falling from a

tree, to the rate of the earth's spin, to the leaping speed of a predacious coyote, to the gentle passing of the seasons, to the wavelengths of visible light and audible sound. We are defined by these velocities, among others." (Chapter 13, p. 107).

Timing and speed in sports in compared to thinking, although it is clear that thinking is not as easily timed. Many of the world's greatest thinkers, including Darwin and Einstein, claimed to be "slow thinkers."

Gleick discusses the concepts of speed reading and using only ten percent of the human brain.

In Chapter 14, the concept of saving time is reviewed. People were once able to calculate saving hours and minutes by using modern conveniences such as the car or vacuum cleaner. Now, milliseconds are being counted. Gleick asks if milliseconds add up and if so, what is done with them.

In Chapter 15, statisticians claim that people sleep seven hours and eighteen minutes per day sleeping - yet that is not enough. The body requires eight and a half hours for optimum rest but who has the time? Shaving off just over an hour gives people more time for other things and still that is not enough. People try to lose weight, learn languages, and run computer programs while they are asleep.

chapters 16-22

chapters 16-22 Summary and Analysis

In Chapters 16, estimates show that people spend four minutes and a few extra seconds per day on sex. This is not reading about it, thinking or dreaming about it but actually doing it. That totals to approximately one half hour per week for something people say they enjoy more than most anything else including sports or watching television. Another thing that consumes approximately four minutes per day is paperwork. The low number for this act can be accredited to the Paperwork Reduction Act of 1980.

"By 1980 the minutes mattered enough to justify a huge new enforcement apparatus within the federal establishment." (Chapter 16, p. 128).

Unfortunately, like many federal programs, the plan did not apply to the program itself and ended up causing thousands of hours of work to reduce the work of others.

In Chapter 17, as those with hurry sickness rush through the day, it is practically guaranteed that modern conveniences will be used to try to save time. This is especially true when it comes to food preparation. One of the first reports regarding the time saving potential of the microwave showed that it cut four minutes off of meal preparation time. However, what was done with that time? Dishwashers and vacuums also help to cut down on time although it is not proven that the time saved is well spent.

One of the most time eating modern conveniences of today has to do with batteries. It is true that time is saved, yet how much time is used purchasing and replacing batteries?

In Chapter 18, the guidelines for the President's Council on Physical Fitness and Sports are very specific. Gleick outlines exactly how long should be spent on warming up, cooling down, stretching and aerobics. The total is approximately 45 minutes per day. At the time the book was written, Amazon.com had been advertising 900 new books, many of which the would-be reader put on a things to read list. Gleick discusses the amount of time spends on books, magazines, and newspapers versus the time spent exercising.

In Chapter 19, Gleick discusses how by far one of the most noticeable changes in the way people save time is by cutting back on food preparation, consumption, and cleanup. The report mentioned earlier in the Modern Conveniences section discussed food preparation as taking 55 minutes per day. With the advent of faster foods, the preparation, consumption and clean up for the average person is one hour per day. Breakfast cereals started this trend as pre-packaged cold cereals took over cooked breakfasts such as oatmeal. Studies timed how long it took people to eat and foods became faster. Today people eat in the car, at a desk or on the way from one activity to the next. One kid states that his friends eats fast foods all of the time while he eats leisurely homemade meals such as macaroni and cheese from a box.

In Chapter 20, Gleick looks at time with regards to modern conveniences. "It is work - the time-use category subject to the most diligent and official measurements - that finally breaks the back of any compilation of the typical day. Bureaucrats, economists, and academic sociologists are equally frustrated by the contrary messages from seemingly firm statistics." (Chapter 20, p. 151).

In the 1960s it was believed that modern conveniences and progress in the way people worked would produce more leisure time. The opposite has proven to be true. Instead of working less and making more money, people tend to make less money per hour and work an average of an extra month per year than they did in the 1960s.

Despite the attempt to gauge how long people work and the need for accurate calculations, researchers are no farther ahead in producing concrete results.

In Chapter 21, Gleick discusses the use of statistics.

"Government agencies, think tanks, company researchers, and academic sociologists all pursue the mission of creating statistics on how people use time. Any one example tends to be convincing enough. As the statistics accumulate, however, they begin to appear contradictory, self-serving, meaningless and wrong." (Chapter 21, p. 161-162).

Statistics are supposed to give people an idea of how many hours are worked, percentage of those that will be successful, and which are prone to which diseases. However, these statistics are often miscalculated or just plain wrong. If a person keeps a time diary, it may easily show that the activities in one day far surpass 24 hours. What is not considered is the concept of multitasking - how many people talk on the phone while driving or eat dinner while watching television.

In Chapter 22, Gleick addresses multitaskers and how most people do several things at once including shaving, playing with the kids, reading, cooking, and surfing the Internet, etc.

"We have always multitasked - inability to walk and chew gum is a time honored cause for derision - but never so intensely of self-consciously as now." (Chapter 22, p. 167).

Gleick discusses the many ways in which people multitask to save time from booting up a computer while showering to eating and driving at the same time. Also discussed is the birth of multitasking in the 1960s when scientists learned to synchronize computer operations and run several operations at one time. That concept has become pervasive in the lives of every person and every household.

chapters 23-29

chapters 23-29 Summary and Analysis

In Chapter 23, Gleick talks about the movie industry and the fast pace of film production. He uses the filing of the movie "Sphere" with Sharon Stone and Dustin Hoffman as an example. Barry Levinson, the film's director, leads the actors and crew through lightning speed direction and action.

"No matter how fast a movie goes these days - or a situation comedy, a newscast, a music video, or a television commercial - it is not fast enough." (Chapter 23, p. 174).

Some state that music videos and other fast paced forms of media have infiltrated every part of our lives. The images and sounds come at the viewer so fast that the viewer does not have time to digest what he is seeing on the screen.

In Chapter 24, the speed of the movies and other forms of media leads Gleick into talking about television. Gleick and others blame the remote control for allowing people - rather, prompting them - to flip through channels as rapidly as possible. Variety of action and entertainment often replaces quality. Author Saul Bellow refers to this mental state as "an unbearable state of distraction." (Chapter 24, p. 181).

"Pointless but intense excitement holds us, a stimulant powerful but short lived. Remote control switches permit us to jump back and forth, mix up beginnings, middles and ends. Nothing happens in any sort of order... Distraction catches us all in the end and makes mental mincemeat of us." (Chapter 24, p. 181).

Gleick discusses how broadcasters and media production people must adjust to the rapid pace of TV watching and still get the message across.

In Chapter 25, MTV is often seen as a principal villain by some when it comes to the acceleration of television. However, it began much earlier. In the early 1970s, Ted Turner decided that one minute commercials were much too long to be played on his new Cable News Network. The network was known for its two minute headlines and a shorter commercial would be much more appropriate and fit better into the network's format. Turner got his wish in the form of a 30 second commercial. Soon, that was too long. Turner consulted with an industry giant who eventually came up with a 3 second commercial.

MTV premiered in 1981 with the appropriately named song "Video Killed the Radio Star," a song created for the premier. The song proved to be truer than anyone might have guessed. Since the introduction of MTV and similar stations, television has accelerated exponentially.

In Chapter 26, Gleick talks about the appreciation of classical music and how the acceleration of time and media has made it difficult to listen as people did in the past.

"Once upon a time, before Music Television, before remote controls, before books on tape and Internet streaming media, a possible method of enjoying a basic art form was this: a person would sit down and listen to an entire symphony, for however long that took. It is not so easy anymore." (Chapter 26, p. 191).

Gleick talks about the fact that even the aficionados of music begin to get restless and long to reach for a magazine or some other item that would thrust them into the state of multitasking. Unfortunately, those that give in are the ones that lose out. One cannot listen to music - especially classical music - on fast forward. Music, at its very core, is based on time. Pauses, gaps and tempos are placed with care for effect and were meant to be noticed and appreciated.

In Chapter 27, high speed entertainment has also affected movies. Some complain that movies are too slow and the slowest or least interesting parts cannot be speeded up with the use of a remote control. Even using a rented movie and VCR are not fast enough. The answer to this dilemma for many is the art film with subtitles. This type of film can be watched in less than an hour. The entire movie can be put on fast forward and then stopped when a subtitle appears. There are flaws in this theory of course since the subtitles rarely tell the whole story. This new fast forward mentality has also bred a new form of director, one which not all people - especially film buffs, critics and historians - appreciate.

Chapter 28 discusses the use of automated phone systems and directory assistance. Studies have been conducted to cut down on time, use computers instead of people, and to make the calls as short as possible. Gleick also discusses the high pressure jobs of air traffic controllers, many of which crack under the extreme pressure.

In Chapter 29, Gleick talks about Frederick W. "Speedy Taylor" and his contributions to the modern assembly line and speedy manufacturing processes. Taylor was one of the first people to become an efficiency expert during the Industrial Revolution. Taylor was so obsessed with time that he often kept a stopwatch in a hollowed out book. Taylor noted the importance of measuring time between various manufacturing activities and how by saving time, one saved - and made - money.

"Taylorism is the ideal of efficiency applied to production as a scientific method - humans and machines working together, at maximum speed with clockwork rationality." (Chapter 29, p. 213).

Taylor began to blur the lines between the workers and their machines. His "Shop Management" treatise, published in 1903, had a powerful effect on business owners. Taylor said that workers needed to say goodbye to leisure and to learn to work at a high speed with efficiency. This led to the modern concept of assembly line production. While this process stripped workers of leisure time and autonomy, it built great wealth for the company owners.

chapters 30-37

chapters 30-37 Summary and Analysis

In Chapter 30, the ultimate paradox in efficiency is the scheduling of flights. Gleick talks about a flight from Phoenix to Dallas-Fort Worth that flies to two separate points in Virginia before flying to Dallas. This seems to make no sense at all since Virginia is clearly not in the flight path. Everyone has been the victim of this strange pattern. However, the FAA and the people at the airlines insist that there is a method to their madness - saving minutes. The process has become so complicated that people cannot figure it out or alter it - everything must be done by computer.

In Chapter 31, Gleick refers to the book "365 Ways to Save Time." The book has a list of ways in which to save time and gives ideas on what types of things can be done at the same time. For example, one can listen to an audio book while driving to perhaps learn a foreign language. There is also advice on savoring the time a person has and using it wisely, even if the time is spent simply daydreaming.

Gleick says: "Saving time is a complex mission. Some of us say we want to save time when we really just want to do more. To leave time free, it is necessary to decide...to leave free time. It might be the simplest to recognize that there is time - however much time - and we make choices about how to spend it, how to spare it, how to use it, and how to fill it." (Chapter 31, p. 232).

In Chapter 32, there may be nothing more frustrating than being put on hold. This is particularly true when trying to reach technical support for a computer problem or trying to buy up those last Yankees tickets. The telephone lottery operates on a first come first serve basis, if the caller can get through at all. Many simply give up. Others make good use of a redial button.

In Chapter 33, the author discusses the economics of time. When Benjamin Franklin said "Time is Money," he was being literal, expecting people to add up their time and the money that could be made. It is clear that Franklin never had to wait at a tollbooth or spend 3 hours waiting for a doctor's appointment when everyone in the waiting room has the same appointment time. The doctor is not concerned with your time and money, only his own. However, one cannot cash in on time wasted or poorly spent.

In Chapter 34, ever since people began to archive and store information on punch cards, floppy disks, magnetic tapes, CDs, etc., the memory of the people has become almost defunct. Emails are sent without much thought and are all but forgotten once read. Many people overlook the fact that nearly all of this information can be retrieved, which may be dangerous for some. For others, however, having electronic files of everything means that no one really has to remember and therefore, no one does.

In Chapter 35, it is said that we are small number people that live in a large number world. Gleick details the centennial celebrations of many things including Columbus' discovery of America, of the Protestant Church and the invention of Baseball. Some make up centennial celebrations. However, the numbers used to celebrate milestones have been relatively small until the dawn of the millennium. Since that time new words have been coined to describe increasingly large numbers, most of which the average person will never use.

In Chapter 36, the author returns to the topic of music. This time Gleick refers to a motet from the Renaissance period. The music lasts for perhaps four minutes but it is slow and by some standards, boring. Nothing much really happens during the song. There are few notes. The issue with multitasking and with running a life at warp speed is that once a person tries to slow down, boredom sets in. Perhaps a person will decide to take a drive because he is bored. Soon, the act of driving becomes boring so the driver turns on the radio and so forth and so on. Nature abhors a vacuum and the speedy modern person cannot seem to sit still without many things to occupy his or her time. Gleick visits the argument that boredom does not exist and that some people simply do not have the time to experience this event.

In Chapter 37, in the end, people must realize that while there is an obsession with time, lives take place in the blink of an eye. Philosophers, historians and our own ancestors realized it yet many in modern society do not. Gleick talks about death being an absolute, but time is not. Time is about making choices and being satisfied with what is chosen.

Characters

James Gleick

James Gleick (1954 -) is a native of New York City. Gleick, author of "Faster: The Acceleration of Just About Everything," graduated from Harvard College, one of two major schools located within Harvard University, in 1976. After founding Metropolis, an alternative weekly newspaper based in Minneapolis, Gleick returned to New York where he worked as a reporter and editor for The New York Times. Gleick has also served as the McGraw Distinguished Lecturer at Princeton University from 1989-90. He collaborated with eminent nature photographer Eliot Porter on the Nature's Chaos, which discussed the presence of chaos as it appears in the natural world. Gleick also worked on Chaos: The Software by Autodesk. In 1993, Gleick founded an early internet service called The Pipeline based in New York. Gleick also served as the first editor of the Best American Science Writing series.

Gleick has several bestsellers to his credit, including his first, "Chaos: Making a New Science." "Chaos" was a national bestseller and was a finalist for the Pulitzer Prize as well as the National Book Award. Gleick's other best selling books include "Isaac Newton" and "Genius: The Life and Science of Richard Feynman." Both books qualified as finalists for the Pulitzer Prize. Gleick also published two other books, "Faster: The Acceleration of Just About Everything" and "What Just Happened?"

Frederick W. Taylor

Frederick W. "Speedy" Taylor was one of the first people to become an efficiency expert during the Industrial Revolution. Taylor was so obsessed with time that he often kept a stopwatch in a hollowed out book. Taylor noted the importance of measuring time between various manufacturing activities and how by saving time, one saved and made money.

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Gernot M. R. Winkler

Gernot M. R. Winkler, the director of the Directorate of Time. In this book WInkler discusses the development of the real second and how we, as a society, demand to be exact. Winkler also is a rare person that says to wear a watch is to admit defeat.

Saul Bellow

Gleick quotes author Saul Bellow in regards to the remote control: "Pointless but intense excitement holds us, a stimulant powerful but short lived. Remote control switches permit us to jump back and forth, mix up beginnings, middles and ends. Nothing happens in any sort of order... Distraction catches us all in the end and makes mental mincemeat of us." (Chapter 24, p. 181).

Edward Tenner

Edward Tenner is the author of "Why Things Bite Back: Technology and the Revenge of Unintended Consequences." Tenner claims that not every software upgrade is necessary and one should practice finesse in making choices.

Arthur D. Little

Arthur D. Little was the head of the Arthur D. Little Foundation. In the 1980s, the Foundation conducted the first comprehensive study on the measurement of time burden and its effect on people filling out tax forms.

Samuel Renshaw

Samuel Renshaw was a Gestalt psychologist at Ohio State University in the 1940s. Renshaw claimed to prove that the average person only uses 20 percent of his modalities. Renshaw was a proponent of speed reading.

George Lakoff and Mark Johnson

George Lakoff and Mark Johnson are the authors of "Metaphors We Live By." The men sought to prove that time really isn't money.

H.G. Wells

H.G. Wells is the author of many science fiction stories including "The New Accelerator" in which the main character seeks to discover a new nervous stimulant. Wells is also famous for "The Time Machine: An Invention."

Juliet Schor

Juliet Schor is the author of the 1991 book "The Overworked American." It is Schor that determined the average person works an additional one month per year than those of the previous generation.

Objects/Places

Time

"Faster: The Acceleration of Just About Everything" begins with this quote: "You are in the Directorate of Time. Naturally, you are running late." (Chapter 1, p. 3).

Author James Gleick discusses the Directorate of Time and the existence of the plethora of atomic clocks based atop a hill near the Potomac River. The clocks are exquisitely precise and to ensure their precision, each is synchronized and compared to many others.

Gleick talks about a time when people relied on the revolving earth to tell time and were happy with the result. That is no longer true.

"Through most of history, time was fixed by astronomical reference points - the Earth spins once, call it a day. No more. The absolute reference as shifted from the stars to the atomic beams in their vaults. Particles are steadier than planets. Never mind the uncertainty principle it is the heavens that cannot be relied on." (Chapter 1, p. 4).

Many say that time is a linear, man-made thing while others argue that this is not true. The book deals with time as a scientific tool but also shows how people view and use time in every day life. The concept of time is often skewed and those that do not value time or perhaps overvalue it, are bound to wreak havoc in their lives.

Modern conveniences and time saving devices have caused society to become obsessed with time, so much so that every second seems to count even when it may not truly matter.

It is noted however that society does not make use of the time saved for leisure purposes. Instead, people cram more into each day and still cannot find enough time to do everything. Gleick insists those that do not understand time are bound to be ruled by it.

Acceleration

One of the main themes in the book is acceleration. Valuing or overvaluing time causes people to want to do more things and to do them faster. Multitasking is a way of life for most people. Many eat while watching TV, talk to the kids or listen to audio books while driving or attempt to learn a foreign language during sleeping hours. The more people do, the more people want to do. Unfortunately, this often causes stress because people begin to compare themselves to others and believe that they could be doing more and more more.

Gleick discuss various types of accelerants. The knowledge and understanding the concept of time works as an accelerant. There are others, namely amphetamines and caffeine. Methamphetamine is a popular drug and is among several that have coined the use of the term "speed." Speed has become a metaphor within a metaphor and people automatically relate the concept to something that's "on speed." "Rush" is also a metaphor and is so popular that it is used in ad campaigns for caffeinated drinks.

With acceleration comes a loss of leisure time, appreciation for things that take concentration such as classical music.

Modern Conveniences

Modern conveniences are addressed many times throughout the book as being the ultimate in time savers for the average person, particularly the homemaker. However, modern conveniences often take up time in other areas.

Fast food

The concept of fast food began with breakfast cereals. From there, it went a step further to frozen TV dinners and beyond. Now the majority of people patronize fast food restaurants in order to save time.

Computers

Computers may be the root of the concept of "real time." While computers certainly save a great deal of time, people often have to make sacrifices elsewhere. Additionally, computers have encouraged technology to move at the speed of light, enhancing the need for speed and causing a more hectic lifestyle.

Industrial Revolution

The Industrial Revolution took place in the late 1800s when machines were introduced into the workplace, creating an entirely new way of manufacturing products.

MTV

MTV is a music television network that premiered in 1981. Many people blame the acceleration of the media on MTV and like outlets for always supplying fast images and information.

Media

Media floods society in more ways than ever via the Internet, television, radio, magazines, newspapers, books, and more. As society accelerates, so does the media, often creating a frenetic sense of urgency.

Remote Controls

The use of remote controls adds to the fast paced world of media. People want more, faster. The remote allows people to switch channels rapidly, getting as much variety in as short a time as possible.

Leisure Time

Leisure time is almost non-existent for most people in a hectic society that tells people to do as much as possible every waking minute.

Themes

Time

"Faster: The Acceleration of Just About Everything" begins with this quote: "You are in the Directorate of Time. Naturally, you are running late." (Chapter 1, p. 3).

Author James Gleick discusses the Directorate of Time and the existence of the plethora of atomic clocks based atop a hill near the Potomac River. The clocks are exquisitely precise and to ensure their precision, each is synchronized and compared to many others.

Gleick talks about a time when people relied on the revolving earth to tell time and were happy with the result. That is no longer true.

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Media

In the 1970s, Ted Turner wanted to speed up the time taken by commercials on his new Cable News Network. Turner decided that one minute commercials were much too long to be played on his new Cable News Network. The network was known for its two minute headlines and a shorter commercial would be much more appropriate and fit better into the network's format. Turner got his wish in the form of a 30 second commercial. Soon, that was too long. Turner consulted with an industry giant who eventually came up with a 3 second commercial.

MTV (Music Television) premiered in 1981 with the appropriately named song "Video Killed the Radio Star," a song created for the premier. The song proved to be truer than anyone might have guessed. Since the introduction of MTV and similar stations, television has accelerated exponentially. Many people blame the acceleration of the media on MTV and like outlets for always supplying fast images and information.

Over the years, media has continued to accelerate. Media currently floods society in more ways than ever via the Internet, television, radio, magazines, newspapers, books, and more. As society accelerates, so does the media, often creating a frenetic sense of urgency.

Style

Perspective

James Gleick (1954 -) is a native of New York City. Gleick, author of "Faster: The Acceleration of Just About Everything," graduated from Harvard College, one of two major schools located within Harvard University, in 1976. After founding Metropolis, an alternative weekly newspaper based in Minneapolis, Gleick returned to New York where he worked as a reporter and editor for The New York Times. Gleick has also served as the McGraw Distinguished Lecturer at Princeton University from 1989-90. He collaborated with eminent nature photographer Eliot Porter on the Nature's Chaos, which discussed the presence of chaos as it appears in the natural world. Gleick also worked on Chaos: The Software by Autodesk. In 1993, Gleick founded an early internet service called The Pipeline based in New York. Gleick also served as the first editor of the Best American Science Writing series.

Gleick has several bestsellers to his credit, including his first, "Chaos: Making a New Science." "Chaos" was a national bestseller and was a finalist for the Pulitzer Prize as well as the National Book Award. Gleick's other best selling books include "Isaac Newton" and "Genius: The Life and Science of Richard Feynman." Both books qualified as finalists for the Pulitzer Prize. Gleick also published two other books, "Faster: The Acceleration of Just About Everything" and "What Just Happened?"

Tone

James Gleick is the author of "Faster: The Acceleration of Just About Everything." This is a work of non-fiction. The tone of the book is typically non-partisan. This is a particularly difficult tone to achieve considering the personal experiences and controversial material in the text. The material was painstakingly researched and compiled by science writer James Gleick.

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Gleick presents material in a straightforward manner. It is chronological in nature with historical references to various scientists that are involved in developing new theories. The book attempts to create a story that the lay person as well as the fledgling scientist can relate to and to also make complex theories accessible.

Structure

"Faster: The Acceleration of Just About Everything" by James Gleick is a work of non-fiction. It is compromised of 281 pages and contains 37 chapters, notes, acknowledgments, and an index.

The shortest chapter is 4 pages in length; the longest chapter is 12 pages in length. The average length of the chapters is 8 pages.

Gleick presents material in a straightforward manner. It is chronological in nature with historical references to various scientists that are involved in developing new theories. The book attempts to create a relatable story for the lay person as well as the fledgling scientist and to make complex theories accessible. Gleick manages, in his humorous and plain language, to describe the scientific principals of time without overwhelming the reader. The author points out the ridiculousness of some of the things people do to save time or how it is wasted.

Chapters include:

Chapter 1: Pacemaker

Chapter 2: Life as Type A

Chapter 3: The Door Close Button

Chapter 4: Your Other Face

Chapter 5: Time Goes Standard

Chapter 6: The New Accelerators

Chapter 7: Seeing in Slow Motion

Chapter 8: In Real Time

Chapter 9: Lost in Time

Chapter 10: On Internet Time

Chapter 11: Quick - Your Opinion?

Chapter 12: Decomposition Takes Time

Chapter 13: On Your Mark, Get Set, Think

Chapter 14: A Millisecond Here, a Millisecond There

Chapter 15: 1,440 Minutes a Day

Quotes

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"The computers could instruct elevators to give preference to floors with many calls. But elevator engineers know better than to provide any greater incentive than already exists for repeated pressing of the button. They remember Pavlov. They know what happens to those dogs." (Chapter 3, p. 30).

"The great instrument of connectedness was, of course, the telephone, transforming the century end to end." (Chapter 10, p. 85).

"We are bumping against a speed limit. We can take real time communication only so far - at least until humanity becomes a single organism with parts conjoined as a light-speed consciousness." (Chapter 11, p. 100).

"From a cosmic point of view, the velocity of human thought is more or less fixed - attuned in sometimes useful ways to the velocity of an apple falling from a tree, to the rate of the earth's spin, to the leaping speed of a predacious coyote, to the gentle passing of the seasons, to the wavelengths of visible light and audible sound. We are defined by these velocities, among others." (Chapter 13, p. 107).

"By 1980 the minutes mattered enough to justify a huge new enforcement apparatus within the federal establishment." (Chapter 16, p. 128).

"It is work - the time-use category subject to the most diligent and official measurements - that finally breaks the back of any compilation of the typical day. Bureaucrats, economists, and academic sociologists are equally frustrated by the contrary messages from seemingly firm statistics." (Chapter 20, p. 151).

"Government agencies, think tanks, company researchers, and academic sociologists all pursue the mission of creating statistics on how people use time. Any one example tends to be convincing enough. As the statistics accumulate, however, they begin to appear contradictory, self-serving, meaningless and wrong." (Chapter 21, p. 161-162).

"We have always multitasked - inability to walk and chew gum is a time honored cause for derision - but never so intensely of self-consciously as now." (Chapter 22, p. 167).

"No matter how fast a movie goes these days - or a situation comedy, a newscast, a music video, or a television commercial - it is not fast enough." (Chapter 23, p. 174).

"Pointless but intense excitement holds us, a stimulant powerful but short lived. Remote control switches permit us to jump back and forth, mix up beginnings, middles and ends. Nothing happens in any sort of order... Distraction catches us all in the end and makes mental mincemeat of us." (Chap. 24, p. 181).

Topics for Discussion

Name five modern conveniences that you could not live without. Explain each one and why living without that item would make it impossible to function in an efficient way.

How might things be even faster 20 or 50 or 100 years from now? Which items would become obsolete and why?

What is the single most important invention in the time-saving realm? Choose one from the past century and explain the reason behind the choice.

What is the downside of multitasking? What does a person sacrifice by doing so many things at one time?

Gleick says that people work an average of one extra month per year than they did in the previous generation. Why? What caused the change? Can it be reversed?

What item might you create in order to make things go faster still? Discuss and submit a plan for the idea and how it would work.

Keep a time diary for an entire week. Compare in class and discuss if Gleick's comments on inaccuracies are correct.