Charlie Munger is Warren Buffett’s long-time partner at Berkshire Hathaway. Content to being the lesser known of the two, Munger is no less impressive. Bill Gates says that Charlie “is truly the broadest thinker I have ever encountered.” Of their 50-year partnership, Buffett “couldn’t be more grateful” for their friendship and says Charlie fits the profile of the ideal partner who is “both smarter and wiser.”

Poor Charlie’s Almanack is a collection of Charlie Munger’s best advice given over 30 years, in the form of 11 speeches given as commencement addresses and roundtable talks. In all his talks, he shows wit, rationality, and incredible clarity of thought.

In this summary of Poor Charlie’s Almanack, I’ve extracted the most important points and organized them by topic. It’s no replacement for his original speeches (where he says things like “if you mix raisins with turds, and you’ve still got turds”). But this summary helps remind me of his main lessons.

You’ll learn why Charlie considers multidisciplinary learning vital to success, his checklist for investment criteria, and how to build a trillion dollar company from scratch.
The Key Points of Poor Charlie’s Almanack

- Strive to be objective. Force yourself to consider arguments on the other side, and argue them better than the other side can. Learn to handle mistakes. Be OK with being wrong. Seek to destroy your favorite ideas.
- Invert, always invert. Turn a situation around. How can you best destroy your own life right now? How can your company best fail if that were your aim? Then invert the answer to find what to do.
- Be interdisciplinary. Take the best ideas from the major fields. This avoids “man with a hammer” syndrome where you have one hammer and everything looks like a nail.
- Build a lattework of mental models to understand phenomena. Mental models include psychological biases, opportunity cost, autocatalysis.
- Know your circle of competence. If you’re outside of it, wait and learn more before acting.
- To succeed in investing, don’t make a lot of bets. Because of pari mutuel, it’s hard to tell whether something is a great deal immediately. Wait to find great deals, then bet huge.
- Learn vicariously from other people’s mistakes, rather than make them yourself.
- Our brains are faulty. Use checklists to analyze decisions and recognize biases.
- Remember the exercise of how to build a trillion dollar company. Be able to explain the success of a company from first principle, using major mental models, inversion, psychological biases. This will help you avoid mistakes that undo your work.

Below:

- Quotes without attribution are Charlie Munger
- Quotes with attribution are not Charlie Munger
- Notes in [brackets] or without quotes are mostly mine (some are the author of the book)
On Rationality and Decision Making

When asked to describe himself in one word, Charlie Munger chose “rational.” He knows he’s subject to the same biases affecting all other humans, and he’s trained himself to recognize when they’re active and how to limit their damage. Here’s a Poor Charlie’s Almanack summary of the top quotes on rationality.

Objectivity and Changing One’s Mind

Poor Charlie’s Almanack resurfaces the necessity of recognizing the truth in the world, not what you want to believe.

- “I think that one should recognize reality even when one doesn’t like it; indeed, especially when one doesn’t like it.”
- “Faced with one’s the mind choice and between proving there is no need to do so, almost everyone gets busy on the proof.” – John Kenneth Galbraith
- “Any year that you don’t destroy one of your best-loved ideas is probably a wasted year.”
- “It’s bad to have an opinion you’re proud of if you can’t state the arguments for the other side better than your opponents. This is a great mental discipline.”
- “We all are learning, modifying, or destroying ideas all the time. Rapid destruction of your ideas when the time is right is one of the most valuable qualities you can acquire. **You must force yourself to consider arguments on the other side.**”
- “Never fool yourself, and remember that you are the easiest person to fool.” – Richard Feynman
- “Apply logic to help avoid fooling yourself. Charlie will not accept anything I say just because I say it, although most of the world will.” – Warren Buffett
- “How many legs does a dog have if you call the tail a leg? Four. Calling a tail a leg doesn’t make it a leg.” – Abraham Lincoln
- “Most people early achieve and later intensify a tendency to process new and disconfirming information so that any original conclusion remains intact. They become people of whom Philip Wylie observed: “You couldn’t squeeze a dime between what they already know and what they will never learn.”
- “Both Warren and I are very good at changing our prior conclusions. We work at developing that facility because, without it, disaster often comes.”
- “If people tell you what you really don’t want to hear—what’s unpleasant—there’s an almost automatic reaction of antipathy. You have to train yourself out of it. It isn’t foredestined that you have to be this way. But you will tend to be this way if you don’t think about it.”
  - “[CBS head] Paley was a god. But he didn’t like to hear what he didn’t like to hear, and people soon learned that. So they told Paley only what he liked to hear. Therefore, he was soon living in a little cocoon of unreality and everything else was corrupt.”
- “One trick in life is to get so you can handle mistakes. Failure to handle psychological denial is a common way for people to go broke. You’ve made an enormous commitment to something. You’ve poured effort and money in. And the more you put in, the more that the whole consistency principle makes you think, “Now it has to work. If I put in just a little more, then it’ll work.”
- “Deprival super-reaction syndrome also comes in: You’re going to lose the whole thing if you don’t put in a little more. People go broke that way—because they can’t stop, rethink, and say, “I can afford to write this one off and live to fight again. I don’t have to pursue this thing as an obsession—in a way that will break me.””
- “A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it.” - Max Planck
- “Truth is hard to assimilate in any mind when opposed by interest.” Be aware of your own and others’ incentive-caused biases.
• “What a man wishes, he will believe.” – Demosthenes
• Avoid intense ideologies. “When you announce that you’re a loyal member of some cult-like group and you start shouting out the orthodox ideology, what you’re doing is pounding it in, pounding it in, pounding it in. You’re ruining your mind, sometimes with startling speed. So you want to be very careful with intense ideology.”
• “I feel that I’m not entitled to have an opinion unless I can state the arguments against my position better than the people who are in opposition.”

Divergence and Contrary Thinking
Charlie Munger thinks social proof causes humans to think like sheep, so contrary thinking invites new ideas that are possibly more objectively correct. Here are the best quotes from Poor Charlie’s Almanack on innovative thinking:

• “Mimicking the herd invites regression to the mean.”
• Given Charlie’s record of success, not to mention Buffett’s endorsement, why aren’t his investment practices more routinely emulated by others? Perhaps the answer is that, for most people, Charlie’s multidisciplinary approach is simply too hard. Further, few investors share Charlie’s willingness to appear foolish by not following “the herd.”
• “Anyone has to be flabbergasted by Japan’s recession, which has endured for ten years, despite interest rates below one percent. The government is playing all the monetary games, but it’s not working. If you had described this situation to Harvard economists, they would have said it’s impossible. Yet at the same time, there’s an asset bubble in Hong Kong. Why? Because Japan and China are two vastly different cultures. The Chinese are gamblers. This is a classic example of why, to be a successful investor, one must draw from many disciplines. Imagine an economist standing up at a meeting of economists and giving my explanation. It wouldn’t be politically correct! But the tools of economics don’t explain what’s going on.”
• “Crowd folly,” the tendency of humans, under some circumstances, to resemble lemmings, explains much foolish thinking of brilliant men and much foolish behavior - like investment management practices of many foundations represented here today. It is sad that today each institutional investor apparently fears most of all that its investment practices will be different from practices of the rest of the crowd.”
• As one small example, Charlie bought a tennis ball practice machine and practiced volleys endlessly. Much like golf short game, which is tedious and no one really likes practicing, mastering volleys gave him a competitive advantage.

Invert, Always Invert
Charlie mentions this tool often in Poor Charlie’s Almanack, and it’s an effective tool. Look at your problem from the opposite perspective, and it may reveal new insights.

• “What’s the flip side? What can go wrong that I haven’t seen?”
• “Invert, always invert. Many hard problems are best solved only when they are addressed backwards.”
  o “For instance, when almost everyone else was trying to revise the electromagnetic laws of Maxwell to be consistent with the motion laws of Newton, Einstein discovered special relativity as he made a 180-degree turn and revised Newton’s laws to fit Maxwell’s.”
• “Well, great declarers in bridge think, “How can I take the necessary winners?” But they think it through backwards, [too. They also think,] “What could possibly go wrong that could cause me to have too many losers?”
• “If you want to help India, the question you should consider asking is not: “How can I help India?” Instead, you should ask: “How can I hurt India?” You find what will do the worst damage, and then try to avoid it.”
Circle of Competence
Charlie Munger and Warren Buffett know what they’re good at, and what they’re bad at. (He explains in Poor Charlie’s Almanack why Berkshire Hathaway doesn’t invest in technology companies.) Don’t get overconfident and subject to the Twaddle tendency where you think you know a lot more than you do – this can cause terrible mistakes.

- “Knowing what you don’t know is more useful than being brilliant.”
- “People are trying to be smart—all I am trying to do is not to be idiotic, but it’s harder than most people think.”
- “You have to figure out what your own aptitudes are. If you play games where other people have the aptitudes and you don’t, you are going to lose.”
- “We try more to profit from always remembering the obvious than from grasping the esoteric. It is remarkable how much long-term advantage people like us have gotten by trying to be consistently not stupid, instead of trying to be very intelligent.”
- “We have three baskets for investing: yes, no, and too tough to understand.” To identify potential “yes” candidates, Charlie looks for an easy to understand, dominant business franchise that can sustain itself and thrive in all market environments. Understandably, few companies survive this first cut. Many investor favorites such as pharmaceuticals and technology, for example, go straight to the “too tough to understand” basket. Heavily promoted “deals” and IPOs earn immediate “no’s.” Those that do survive this first winnowing are subjected to the screens and filters of Charlie’s mental model approach.
- “Warren and I don’t feel like we have any great advantage in the high-tech sector. In fact, we feel like we’re at a big disadvantage in trying to understand the nature of technical developments in software, computer chips, or what have you. So we tend to avoid that stuff, based on our personal inadequacies.”
- On one occasion the chauffeur, who by this time knew the lecture by heart, suggested that he and Planck switch places. At the conclusion of the chauffeur’s flawless recitation of the lecture, a physicist stood up and posed a very difficult question. The chauffeur, ready for the situation, replied, “I’m surprised that a citizen of an advanced city like Munich is asking so elementary a question, so I’m going to ask my chauffeur to respond.” In the real world, it is critical to distinguish when you are “Max Planck,” and when you are the “chauffeur.” If you cannot respond legitimately to the next question, you lack true mastery and are likely outside your “Circle of Competence.”
  - “One is Planck knowledge, that of the people who really know. They’ve paid the dues, they have the aptitude. Then we’ve got chauffeur knowledge. They have learned to prattle the talk. They may have a big head of hair. They often have fine timbre in their voices. They make a big impression. But in the end what they’ve got is chauffeur knowledge masquerading as real knowledge.”
- “It’s great to have a manager with a 160 IQ – unless he thinks it’s 180.”
- “If you have competence, you know the edge. It wouldn’t be a competence if you didn’t know where the boundaries lie. [Asking whether you’ve passed the boundary is] a question that almost answers itself.”
- Anecdote of bees
  - “When a bee finds nectar, it comes back and does a little dance that tells the rest of the hive, as a matter of genetic programming, which direction to go and how far. So about forty or fifty years ago, some clever scientist stuck the nectar straight up. Well, the nectar’s never straight up in the ordinary life of a bee. The nectar’s out. So the bee finds the nectar and returns to the hive. But it doesn’t have the genetic programming to do a dance that says straight up. So what does it do?
  - “Well, if it were like Jack Welch, it would just sit there. But what it actually does is to dance this incoherent dance that gums things up. And a lot of people are like that bee. They attempt to answer a question like that. And that is a huge mistake. Nobody expects you to know everything about everything. I try to get rid of people who always confidently answer questions about which they don’t have any real knowledge. To me, they’re like the bee dancing its incoherent dance. They’re just screwing up the hive.”
• “The hedge fund known as “Long-Term Capital Management” recently collapsed through overconfidence in its highly leveraged methods, despite I.Q.’s of its principals that must have averaged 160. Smart, hardworking people aren’t exempted from professional disasters from overconfidence. Often, they just go aground in the more difficult voyages they choose, relying on their self-appraisals that they have superior talents and methods.”

• “It is impossible to begin to learn that which one thinks one already knows.” – Epictetus

**Discipline in Choosing Good Ideas**

• "Perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do, when it ought to be done, whether you like it or not. It is the first lesson that ought to be learned and however early a man's training begins, it is probably the last lesson that he learns thoroughly.” – Thomas Henry Huxley

• “Ted Williams is the only baseball player who had a .400 single-season hitting record in the last seven decades. In the Science of Hitting, he explained his technique. He divided the strike zone into seventy-seven cells, each representing the size of a baseball. He would insist on swinging only at balls in his ‘best’ cells, even at the risk of striking out, because reaching for the ‘worst’ spots would seriously reduce his chances of success. As a securities investor, you can watch all sorts of business propositions in the form of security prices thrown at you all the time. For the most part, you don’t have to do a thing other than be amused. Once in a while, you will find a ‘fat pitch’ that is slow, straight, and right in the middle of your sweet spot. Then you swing hard.” – Li Lu

• “I could improve your ultimate financial welfare by giving you a ticket with only twenty slots in it so that you had twenty punches— representing all the investments that you get to make in a lifetime. And once you’d punched through the card you couldn't make any more investments at all. Under those rules, you’d really think carefully about what you did and you'd be forced to load up on what you'd really thought about. So you'd do so much better.” – Warren Buffett

• "It’s not the bad ideas that do you in. it’s the good ideas. And you may say, ‘That can’t be so. That’s paradoxical.’ What he [Graham] meant was that if a thing is a bad idea, it's hard to overdo. But where there is a good idea with a core of essential and important truth, you can't ignore it. And then it's so easy to overdo it. So the good ideas are a wonderful way to suffer terribly if you overdo them."

• “We like to make hay while the sun sets, knowing that it will surely rise again.” – Warren Buffett

• “If you’re comfortably rich and someone else is getting richer faster than you by, for example, investing in risky stocks, so what?! Someone will always be getting richer faster than you. This is not a tragedy.” “Soros couldn’t bear to see others make money in the technology sector without him, and he got killed. It doesn’t bother us at all [that others are making money in the tech sector].”

• On Lou Simpson and the dotcom bubble: “You can’t believe the pressure that he was under, year after year, as the world seemed to be reaping enormous gains while he, correctly, avoided the bubble altogether, staying true to fundamentals. Lou was a wonderful example in that period—intelligent, honorable, and true to his fundamentals.”

**Learning Vicariously from Others’ Mistakes**

• “The more hard lessons you can learn vicariously, instead of from your own terrible experiences, the better off you will be.”

• “I believe in the discipline of mastering the best that other people have ever figured out. I don’t believe in just sitting down and trying to dream it all up yourself.”

• “I sought good judgment mostly by collecting instances of bad judgment, then pondering ways to avoid such outcomes.”
Ideological Bias

Ideology skews your decision making – your beliefs morph your view of reality and cause you to deny competing evidence (especially as humans are prone to avoiding contradicting themselves). Here’s a Poor Charlie’s Almanack summary of quotes:

- [talking about how Chomsky can’t admit that language is built into our genome] “Pinker can’t understand why Chomsky—who, again, is such a genius—takes the position that the jury’s still out about why this ability is in the human genome. Pinker, in effect, says: “Like hell, the jury is still out! The language instinct got into humans in exactly the same way that everything else got there—through Darwinian natural selection.” Well, the junior professor is clearly right—and Chomsky’s hesitation is a little daft. But if the junior professor and I are right, how has a genius like Chomsky made an obvious misjudgment? The answer’s quite clear to me—Chomsky is passionately ideological. He is an extreme egalitarian leftist who happens to be a genius. And he’s so smart that he realized that if he concedes this particular Darwinian point, the implications threaten his leftist ideology. So he naturally has his conclusion affected by his ideological bias.”
- “Ideology does some strange things and distorts cognition terribly. If you get a lot of heavy ideology young—and then you start expressing it—you are really locking your brain into a very unfortunate pattern. And you are going to distort your general cognition.”
- “You can have heavy ideology in favor of accuracy, diligence, and objectivity. But a heavy ideology that makes you absolutely sure that the minimum wage should be raised or that it shouldn’t—and it’s kind of a holy construct where you know you’re right—makes you a bit nuts.”
- “Maximizing non-egalitarian will often work wonders. John Wooden of UCLA presented an instructive example when he was the number one basketball coach in the world. He said to the bottom 5 players, “You don’t get to play- you are practice partners.” The top seven did almost all the playing…I think the game of competitive life often requires maximizing the experience of the people who have the most aptitude and the most determination as learning machines. And if you want the very highest reaches of human achievement, that’s where you have to go. You do not want to choose a brain surgeon for your child by drawing straws to select one of fifty applicants, all of whom take turns doing procedures. You don’t want your airplanes designed in too egalitarian a fashion. You don’t want your Berkshire Hathaways run that way either. You want to provide a lot of playing time for your best players.”
- [See similar ideas about avoiding moral compass in evaluating ideas from Tools of Titans.]
- [Being a fanatic can help you persevere through a business, but it can also blind you to bad decisions. For instance, if you strongly believe healthcare should be free for everyone, it can collapse your company when a better decision violates that maxim.]
On Mental Models

Charlie Munger has learned a lot about the world, and he calls the main ideas from the major fields “mental models.” He stresses the importance of multidisciplinary learning and connecting the major ideas together in a latticework. Here’s a Poor Charlie’s Almanack summary of Munger’s mental models.

Latticework of Mental Models

- “You can’t really know anything if you just remember isolated facts and try and bang ‘em back. If the facts don’t hang together on a latticework of theory, you don’t have them in a usable form. You’ve got to have models in your head. And you’ve got to array your experience—both vicarious and direct- on this latticework of models.”
- “I’ve long believed that a certain system— which almost any intelligent person can learn— works way better than the systems that most people use. What you need is a latticework of mental models in your head. And, with that system, things gradually get to fit together in a way that enhances cognition.”
- “The first rule is that you’ve got to have multiple models —because if you have just one or two that you’re using, the nature of human psychology is such that you’ll torture reality so that it fits your models, or at least you’ll think it does. And the models have to come from multiple disciplines—because all the wisdom of the world is not to be found in one little academic department. That’s why poetry professors, by and large, are so unwise in a worldly sense.”
- His models supply the analytical structure that enables him to reduce the inherent chaos and confusion of a complex investment problem into a clarified set of fundamentals.
- “Especially big forces often come out of these one hundred models. When several models combine, you get lollapalooza effects; this is when two, three, or four forces are all operating in the same direction. And, frequently, you don’t get simple addition. It’s often like a critical mass in physics where you get a nuclear explosion if you get to a certain point of mass— and you don’t get anything much worth seeing if you don’t reach the mass. Sometimes the forces just add like ordinary’ quantities and sometimes they combine on a breakpoint or critical-mass basis.”
- "Personally, I’ve gotten so that I now use a kind of two-track analysis. First, what are the factors that really govern the interests involved, rationally considered? And second, what are the subconscious influences where the brain at a subconscious level is automatically forming conclusions in various ways— which, by and large, are useful— but which often malfunction? One approach is rationality— the way you’d work out a bridge problem, by evaluating the real interest, the real probabilities, and so forth. And the other is to evaluate the psychological factors that cause subconscious conclusions— many of which are wrong.”
- On math: “people can’t naturally and automatically do this. If you understand elementary psychology, the reason they can’t is really quite simple: The basic neural network of the brain is there through broad genetic and cultural evolution. And it’s not Fermat/Pascal. It uses a very crude, shortcut-type of approximation. So you have to learn in a very usable way this very elementary math and use it routinely in life—just the way if you want to become a golfer, you can’t use the natural swing that broad evolution gave you. You have to learn to have a certain grip and swing in a different way to realize your full potential as a golfer.”
- Get the guts without the details
  - “I’m not sure that I can even pronounce the Gaussian distribution, although I know what it looks like and I know that events and huge aspects of reality end up distributed that way. So I can do a rough calculation. But if you ask me to work out something involving a Gaussian distribution to ten decimal points, I can’t sit down and do the math. I’m like a poker player who’s learned to play pretty well without mastering Pascal.”
  - “You don’t have to know it all. Just take in the best big ideas from all these disciplines.”
- Ignore jurisdictional boundaries
“I urge a multidisciplinary approach—that you’ve got to have the main models from a broad array of disciplines and you’ve got to use them all—I’m really asking you to ignore jurisdictional boundaries.”

“Some of the worst dysfunctions in businesses come from the fact that they balkanize reality into little individual departments with territoriality and turf protection and so forth. So if you want to be a good thinker, you must develop a mind that can jump the jurisdictional boundaries.”

[when criticized for getting rid of calculators] “Well, I am like a guy who is prospecting for gold along the banks of the Sacramento River in 1849. With a little intelligence, I can reach down and pick up big nuggets of gold. And as long as I can do that, I’m not going to let any people in my department waste scarce resources in placer mining.” - Thomas Hunt Morgan. [Charlie’s point is that in economics, there is man-with-a-hammer syndrome, where they look only for concepts that can be neatly defined in numbers, but there is much more interesting and powerful stuff when combining multiple disciplines.]

**Mental Models Suggested**

These are mental models suggested directly in *Poor Charlie’s Almanack*. It’s not a complete set of mental models you should know, but is a good start to build off of.

- **General**
  - 2nd, 3rd order effects
- **Math**
  - Numbers, quantities, basic arithmetic
  - Compound interest
  - Permutations and combinations
  - Accounting
  - Decision Trees
  - Gaussian distribution
- **Psychology**
  - Incentive-caused bias
  - Hammer-and-nail bias
  - Appealing to person’s self-interest
  - Consistency principle
  - Social proof
  - Sunk cost
  - Deprival super-reaction
  - First conclusion bias
  - Crowd folly
  - Reciprocity
  - Five Ws – Who, What, Where, When, Why
- **Engineering**
  - Backup system
  - Breakpoints
  - Margin of safety
- **Physics**
  - Critical mass
  - Autocatalysis
  - Equilibrium
- **Economics**
• Free market economy is an ecosystem where specializers can occupy a niche
• Advantages of scale
• Disadvantages of scale
• Balances of advantages and disadvantages
• Wealth effect
• Opportunity cost
• Incentives
• Tragedy of the commons
• Comparative advantage in trade
• Specialization

• Markets
  • Technology can help or kill you
  • Competitive destruction with technology
  • Pari-mutuel system
  • Mr Market
  • A stock is a piece of business
  • Margin of safety
  • Cancer surgery formula
    ▪ Cut out everything in a business that doesn’t work, and you’re left with something that does.

• Management
  • Checklists
  • Big “no-brainer” questions
  • Patents and trademarks

• Biology
  • Natural selection
  • Feedback loops

• Statistics
• Philosophy
• History

On Pros and Cons of Scale

• Advantages
  • “The very nature of things is that if you get a whole lot of volume through your operation, you get better at processing that volume.”
  • Efficient complex processes = difficult moat
  • Winner-takes-all aspects
    ▪ Flywheel effects of size
      • Large newspapers get most of the circulation, which drives most of the advertising, which drives more circulation.
  • Surmounts barriers to entry – eg nationwide brand advertising gives big brands a tailwind
  • Social proof

• Disadvantages of Scale
  • Inability to specialize and explore niches, and be efficient at that specialization
  • Bureaucracy
    ▪ The delivery of value is unclear, so people shuffle work from one to another
    ▪ Slow to make decisions
- Corruption – I won’t bother you if you won’t bother me
- “The concept of a chain store was a fascinating invention. You get this huge purchasing power—which means that you have lower merchandise costs. You get a whole bunch of little laboratories out there in which you can conduct experiments. And you get specialization. If one little guy is trying to buy across twenty-seven different merchandise categories influenced by traveling salesmen, he’s going to make a lot of dumb decisions. But if your buying is done in headquarters for a huge bunch of stores, you can get very bright people that know a lot about refrigerators and so forth to do the buying. The reverse is demonstrated by the little store where one guy is doing all the buying. It’s like the old story about the little store with salt all over its walls. And a stranger comes in and says to the store owner, “You must sell a lot of salt.” And he replies, “No, I don’t. But you should see the guy who sells me salt.”

The Importance of Psychology and Bad Decisionmaking
- “The perceptual apparatus of man has shortcuts in it. The brain cannot have unlimited circuitry. So someone who knows how to take advantage of those shortcuts and cause the brain to miscalculate in certain ways can cause you to see things that aren’t there. So when circumstances combine in certain ways - or more commonly, your fellow man starts acting like the magician and manipulates you on purpose by causing you cognitive dysfunction—you’re a patsy.”
- [Read more about Charlie Munger’s complete set of psychological biases.]

Autocatalysis
- “Disney is an amazing example of autocatalysis. They had all those movies in the can. They owned the copyright. And just as Coke could prosper when refrigeration came, when the videocassette was invented, Disney didn’t have to invent anything or do anything except take the thing out of the can and stick it on the cassette. And every parent and grandparent wanted his descendents to sit around and watch that stuff at home on videocassette. So Disney got this enormous tail wind from life. And it was billions of dollars worth of tail wind. Obviously, that’s a marvelous model if you can find it. You don’t have to invent anything. All you have to do is to sit there while the world carries you forward...”

Second, Third-order Effects
- Forecasting costs and ignoring incentives
  - “Extreme economic ignorance was displayed when various experts, including Ph.D. economists, forecast the cost of the original Medicare law. They did simple extrapolations of past costs.”
  - “Well, the cost forecast was off by a factor of more than one thousand percent. The cost they projected was less than ten percent of the cost that happened. Once they put in place various new incentives, the behavior changed in response to the incentives, and the numbers became quite different from their projection. And medicine invented new and expensive remedies, as it was sure to do. I low could a great group of experts make such a silly forecast? Answer: They oversimplified to get easy figures, like the rube rounding pi to 3.2! They chose not to consider effects of effects on effects, and so on.”
- Supporting China
  - “But suppose you’ve got a very talented ethnic group, like the Chinese, and they’re very poor and backward, and you’re an advanced nation, and you create free trade with China, and it goes on for a long time.
“Now let’s follow second- and third-order consequences. You are more prosperous than you would have been if you hadn’t traded with China in terms of average well-being in the United States, right? Ricardo proved it. But which nation is going to be growing faster in economic terms? It’s obviously China. They’re absorbing all the modern technology of the world through this great facilitator in free trade, and, like the Asian Tigers have proved, they will get ahead fast. Look at Hong Kong. Look at Taiwan. Look at early Japan. So, you start in a place where you’ve got a weak nation of backward peasants, a billion and a quarter of them, and, in the end, they’re going to be a much bigger, stronger nation than you are, maybe even having more and better atomic bombs. Well, Ricardo did not prove that that’s a wonderful outcome for the former leading nation. He didn’t try to determine second-order and higher-order effects.

“If you try and talk like this to economics professors, and I’ve done this three times, they shrink in horror and offense because they don’t like this kind of talk. It really gums up this nice discipline of theirs, which is so much simpler when you ignore second- and third-order consequences.

“The best answer I ever got on that subject—in three tries—was from George Shultz. He said, “Charlie, the way I figure it is if we stop trading with China, the other advanced nations will do it anyway, and we wouldn’t stop the ascent of China compared to us, and we’d lose the Ricardo-diagnosed advantages of trade.” Which is obviously correct. And I said, “Well, George, you’ve just invented a new form of the tragedy of the commons. You’re locked in this system, and you can’t fix it.”

Synthesis of Ideas
When you have a latticework of mental models, you can see how they interact in interesting ways. Here’s one example of two competing economic principles

- “Number one is Ricardo’s principle of comparative advantage in trade, and the other is Adam Smith’s pin factory. And both of these, of course, work to vastly increase economic output per person, and they’re similar in that each somehow directs functions into the hands of people who are very good at doing the functions. Yet, they’re radically different examples in that one of them is the ultimate example of central planning—the pin factory—where the whole system was planned by somebody, while the other example, Ricardo’s, happens automatically as a natural consequence of trade.”

- “And, of course, once you get into the joys of synthesis, you immediately think, “Do these things interact?” Of course they interact. Beautifully. And that’s one of the causes of the power of a modern economic system. I saw an example of that kind of interaction years ago. Berkshire had this former savings and loan company, and it had made this loan on a hotel right opposite the Hollywood Park Racetrack. In due time, the neighborhood changed, and it was full of gangs, pimps, and dope dealers. They tore copper pipe out of the wall for dope fixes, and there were people hanging around the hotel with guns, and nobody would come. We foreclosed on it two or three times, and the loan value went down to nothing. We seemed to have an insolvable economic problem—a microeconomic problem.”

- “Now, we could have gone to McKinsey, or maybe a bunch of professors from Harvard, and we would have gotten a report about ten inches thick about the ways we could approach this failing hotel in this terrible neighborhood. But instead, we put a sign on the property that said: “For sale or rent.” And in came, in response to that sign, a man who said, “I’ll spend $200,000 fixing up your hotel and buy it at a high price on credit, if you can get zoning so I can turn the parking lot into a putting green.” “You’ve got to have a parking lot in a hotel,” we said. “What do you have in mind?” He said, “No, my business is flying seniors in from Florida, putting them near the airport, and then letting them go out to Disneyland and various places by bus and coming back. And I don’t care how bad the neighborhood is going to be because my people are self-contained behind walls. All they have to do is get on the bus in the morning and come home in the evening, and they don’t need a parking lot;
they need a putting green.” So we made the deal with the guy. The whole thing worked beautifully, and the loan got paid off, and it all worked out.”

- “Obviously, that’s an interaction of Ricardo and the pin factory examples. The odd system that this guy had designed to amuse seniors was pure pin factory, and finding the guy with this system was pure Ricardo. So these things are interacting.”
On Investing and Business

In Poor Charlie’s Almanack, Munger doesn’t talk directly about Berkshire Hathaway’s decisions much, but he does share the general investment philosophies and practices that have made them successful over decades.

Berkshire Hathaway

- “We’re like the hedgehog that only knows one big thing: If you can generate float [cash from insurance premiums that Berkshire can invest before claims must be paid] at three percent and invest it in businesses that generate thirteen percent, that’s a pretty good business.”
- “The future will be harder for Berkshire Hathaway for two reasons: 1) We’re so big. It limits our investment options to more competitive areas. 2) The current climate offers prospects in common stocks over the next fifteen to twenty years that are way less than we’ve experienced over the past fifteen to twenty years.”
- “It’s a finite and very competitive world. All large aggregations of capital eventually find it hell on earth to grow and thus find a lower rate of return.”
- “Two-thirds of acquisitions don’t work. Ours work because we don’t try to do acquisitions—we wait for no-brainers.”
- “Lumpy results and being willing to write less insurance business if market conditions are unfavorable...that is one of our advantages as an insurer—we don’t give a damn about lumpy results. Everyone else is trying to please Wall Street. This is not a small advantage.”
- “There are two types of mistakes: 1) doing nothing, what Warren calls “sucking my thumb” and 2) buying with an eyedropper things we should be buying a lot of.”
- “The most extreme mistakes in Berkshire’s history have been mistakes of omission. We saw it, but didn’t act on it. They’re huge mistakes—we’ve lost billions.”
- “Intel and its ilk create a coherent culture where teams solve difficult problems on the cutting edge of science. That’s radically different from Berkshire Hathaway. Berkshire is a holding company. We’ve decentralized all the power except for natural headquarters-type capital allocation...It’s not at all clear to me that Warren or I would be that good at doing what Andy Grove does.”

Investment Practices

Here’s a Poor Charlie’s Almanack summary of the major concepts to know about investing in companies.

- Remember: “Only twenty percent of the people can be in the top fifth”
- “However, the market was not perfectly efficient. With enough shrewdness and fanaticism, some people will get better results than others.” “It is given to human beings who work hard at it—who look and sift the world for a mispriced bet—that they can occasionally find one.”
- Bet seldom, but bet hard when you have a deal
  - “The wise ones bet heavily when the world offers them that opportunity. They bet big when they have the odds. And the rest of the time, they don’t. It’s just that simple.”
  - “How many insights do you need? Well, I’d argue that you don’t need many in a lifetime. If you look at Berkshire Hathaway and all of its accumulated billions, the top ten insights account for most of it.”
  - “It makes sense to load up on the very few good insights you have instead of pretending to know everything about every thing at all times. How many of you have fifty-six brilliant insights in which you have equal confidence? Raise your hands, please. How many of you have two or three insights that you have some confidence in?”
When Warren lectures at business schools, he says, “I could improve your ultimate financial welfare by giving you a ticket with only twenty slots in it so that you had twenty punches — representing all the investments that you got to make in a lifetime. And once you’d punched through the card, you couldn’t make any more investments at all.” He says, “Under those rules, you’d really think carefully about what you did, and you’d be forced to load up on what you’d really thought about. So you’d do so much better.”

“There are huge advantages for an individual to get into a position where you make a few great investments and just sit on your ass: You’re paying less to brokers. You’re listening to less nonsense. And if it works, the governmental tax system gives you an extra one, two, or three percentage points per annum compounded.”

“We just look for no-brainer decisions. As Buffett and I say over and over again, we don’t leap seven-foot fences. Instead, we look for one-foot fences with big rewards on the other side. So we’ve succeeded by making the world easy for ourselves, not by solving hard problems.”

- Pari Mutuel
  - Markets are like betting odds. The best horse is obvious, but it is not obviously a better deal. “Any damn fool can see that a horse carrying a light weight with a wonderful win rate and a good post position, etc., etc., is way more likely to win than a horse with a terrible record and extra weight and so on and so on. But if you look at the damn odds, the bad horse pays 100 to 1, whereas the good horse pays 3 to 2. Then, it’s not clear which is statistically the best bet using the mathematics of Fermat and Pascal.”

  “Over many decades, our usual practice is that if [the stock of] something we like goes down, we buy more and more. Sometimes something happens, you realize you’re wrong, and you get out. But if you develop correct confidence in your judgment, buy more and take advantage of stock prices.”

  “So you can get very remarkable investment results if you think more like a winning pari-mutuel player. Just think of it as a heavy odds against game full of bullshit and craziness with an occasional mispriced something or other. And you’re probably not going to be smart enough to find thousands in a lifetime. And when you get a few, you really load up. It’s just that simple.”

- Mr. Market
  - Instead of thinking the market was efficient, Graham treated it as a manic-depressive who comes by every day. And some days “Mr. Market” says, “I’ll sell you some of my interest for way less than you think it’s worth.” And other days, he comes by and says, “I’ll buy your interest at a price that’s way higher than you think it’s worth.” And you get the option of deciding whether you want to buy more, sell part of what you already have, or do nothing at all. To Graham, it was a blessing to be in business with a manic-depressive who gave you this series of options all the time.”

- Deviating from Graham
  - “Graham didn’t want to ever talk to management. And his reason was that, like the best sort of professor aiming his teaching at a mass audience, he was trying to invent a system that anybody could use. He also had a concept that management would often couch the information very shrewdly to mislead.”

  “We realized that some company that was selling at two or three times book value could still be a hell of a bargain because of momentums implicit in its position, sometimes combined with an unusual managerial skill plainly present in some individual or other, or some system or other.”

  “If a business earns eighteen percent on capital over twenty or thirty years, even if you pay an expensive looking price, you’ll end up with one hell of a result.”

- How to find deals
How do you get into these great companies? One method is what I’d call the method of finding them small— get ’em when they’re little. For example, buy WalMart when Sam Walton first goes public and so forth.”

“Ideally— and we’ve done a lot of this— you get into a great business which also has a great manager because management matters. For example, it’s made a hell of a difference to General Electric that Jack Welch came in instead of the guy who took over Westinghouse— one hell of a difference.”

“However, averaged out, betting on the quality of a business is better than betting on the quality of management.”

There are actually businesses that you will find a few times in a lifetime where any manager could raise the return enormously just by raising prices— and yet they haven’t done it. So they have huge untapped pricing power that they’re not using. That is the ultimate no-brainer. That existed in Disney. It’s such a unique experience to take your grandchild to Disneyland. You’re not doing it that often. And there are lots of people in the country. And Disney found that it could raise those prices a lot, and the attendance stayed right up…Once you figure that out, it’s like finding money in the street— if you have the courage of your convictions.”

How do you and Warren evaluate an acquisition candidate? “We’re light on financial yardsticks; we apply lots of subjective criteria: Can we trust management? Can it harm our reputation? What can go wrong? Do we understand the business? Docs it require capital infusions to keep it going? What is the expected cash flow? We don’t expect linear growth; cyclicality is fine with us as long as the price is appropriate.”

“It doesn’t help us merely for favorable odds to exist. They have to be in a place where we can recognize them. So it takes a mispriced opportunity that we’re smart enough to recognize. And that combination doesn’t occur often.”

Cancer surgery model

“They look at this mess. And they figure out if there’s anything sound left that can live on its own if they cut away everything else. And if they find anything sound, they just cut away everything else. Of course, if that doesn’t work, they liquidate the business. But it frequently does work.”

Valuing Companies

“A great business at a fair price is superior to a fair business at a great price.”

“We’re partial to putting out large amounts of money where we won’t have to make another decision. If you buy something because it’s undervalued’, then you have to think about selling it when it approaches your calculation of its intrinsic value. That's hard. But, if you can buy a few great companies, then you can sit on your ass. That’s a good thing. “

There are two kinds of businesses: The first earns twelve percent, and you can take the profits out at the end of the year. The second earns twelve percent, but all the excess cash must be reinvested— there’s never any cash. It reminds me of the guy who sells construction equipment— he looks at his used machines, taken in as customers bought new ones, and says, “There’s all of my profit, rusting in my yard.” We hate that kind of business.”

“As one factor, Graham had this concept of value to a private owner— what the whole enterprise would sell for if it were available. If you could take the stock price and multiply it by the number of shares and get something that was one-third or less of sellout value, you've got a lot of edge going for you.”

What Makes Companies Successful?

“Extreme success is likely to be caused by some combination of the following factors:
• A) Extreme maximization or minimization of one or two variables. Example, Costco or our furniture and appliance store.
• B) Adding success factors so that a bigger combination drives success, often in nonlinear fashion, as one is reminded by the concept of breakpoint and the concept of critical mass in physics. Often results are not linear. You get a little bit more mass, and you get a lollapalooza result.
• C) An extreme of good performance over many factors. Example, Toyota or Les Schwab.
• D) Catching and riding some sort of big wave. Example, Oracle.”

Compounding
• “The effect of taxes. If you’re going to buy something that compounds for thirty years at fifteen percent per annum and you pay one thirty-five percent tax at the very end, the way that works out is that after taxes, you keep 13.3 percent per annum”
• “In contrast, if you bought the same investment but had to pay taxes every year of thirty-five percent out of the fifteen percent that you earned, then your return would be fifteen percent minus thirty-five percent of fifteen percent — or only 9.73 percent per year compounded. So the difference there is over 3.5 percent.”
• “You don’t have to be brilliant, only a little bit wiser than the other guys, on average, for a long, long time.”
• Limits thereof
  o “We have said that common stocks generally have generated returns of ten to eleven percent after inflation for many years and that those returns can’t continue for a very long period. And they can’t. It’s simply impossible. The wealth of the world will compound at no such rate.”

Moats and Competitive Advantage
• “So we think in terms of that moat and the ability to keep its width and its impossibility of being crossed as the primary criterion of a great business. And we tell our managers we want the moat widened every year. That doesn’t necessarily mean the profit will be more this year than it was last year because it won’t be sometimes. However, if the moat is widened every year, the business will do very well. When we see a moat that’s tenuous in any way— it’s just too risky’. We don’t know how to evaluate that. And, therefore, we leave it alone.” – Warren Buffett
• “I have a clipping from the 1911 Buffalo Evening News that lists the fifty most important stocks then actively traded on the New York Stock Exchange. Today only one, General Electric, remains in business as a large, independent company. That’s how powerful the forces of competitive destruction are. Over the very long term, history shows that the chances of any business surviving in a manner agreeable to a company’s owners are slim at best. It gets extra tough when a fanatical small competitor— like a Rose Blumkin. or a Les Schwab, or a Sam Walton — sets their sights on your particular marketplace. How do you compete against a true fanatic? You can only try to build the best possible moat and continuously attempt to widen it.”

Competition
• “Over the years, we’ve tried to figure out why the competition in some markets gets sort of rational from the investor’s point of view so that the shareholders do well, while in other markets there’s destructive competition that destroys shareholder wealth. If it’s a pure commodity like airline seats, you can understand why no one makes any money. Competition was so intense that, once it was unleashed by deregulation, it ravaged shareholder wealth in the airline business. Yet, in other fields —like cereals, for example—almost all the big boys make out. why are cereals so profitable—despite the fact that it looks to me like they’re competing like
crazy with promotions, coupons, and everything else? I don’t fully understand it. Obviously, there’s a brand identity factor in cereals that doesn’t exist in airlines. That must be the main factor that accounts for it.”

• “And maybe the cereal makers, by and large, have learned to be less crazy about fighting for market share—because if you get even one person who’s hell-bent on gaining market share.... for example, if I were Kellogg and I decided that I had to have sixty percent of the market, I think I could take most of the profit out of cereals. I’d ruin Kellogg in the process. But I think I could do it.”

• “if you look around at bottler markets, you’ll find many markets where bottlers of Pepsi and Coke both make a lot of money and many others where they destroy most of the profitability of the two franchises. That must get down to the peculiarities of individual adjustment to market capitalism. I think you’d have to know the people involved to fully understand what was happening.”

• The Effect of Technology
  o [In a competitive market, new technology that is accessible to everyone passes the value down only to the consumer. Everyone adopts the technology and there is no edge. If it’s a lousy business, add new technology and it's still a lousy business.]
  o “Discriminate between when technology is going to help you and when it's going to kill you.”
  o “The huge productivity increases that would come from a better machine introduced into the production of a commodity product would all go to the benefit of the buyers of the textiles. Nothing was going to stick to our ribs as owners.”
  o “Conversely, if you own the only newspaper in Oshkosh and they were to invent more efficient ways of composing the whole newspaper, then when you got rid of the old technology and got new, fancy computers and so forth, all of the savings would come right through to the bottom line”
  o “When technology moves as fast as it does in a civilization like ours, you get a phenomenon that I call competitive destruction. You know, you have the finest buggy whip factory, and, all of a sudden, in comes this little horseless carriage. And before too many years go by, your buggy whip business is dead. You either get into a different business or you’re dead— you’re destroyed. It happens again and again and again”
  o “And when these new businesses come in, there are huge advantages for the early birds. And when you’re an early bird, there’s a model that I call “surfing”— when a surfer gets up and catches the wave and just stays there, he can go a long, long time. But if he gets off the wave, he becomes mired in shallows.”
  o [Hence why Berkshire tends not to invest in technology.]

• [On Harvard needing to change its investment methods to be unconventional again, now that its success is now conventional wisdom] “It is quite counter-intuitive to decrease that part of one’s activity that has recently worked best. But this is often a good idea. And so also with reducing one’s perception of one’s needs, instead of increasing risks in an attempt to satisfy perceived needs.”

• “Reinsurance is not as much of a commodity business as it might appear. There’s such a huge time lag between when the policy is written and when it is paid that the customer has to evaluate the insurer’s future willingness and ability to pay.”

Common Investment Myths

• “The reason we avoid the word “synergy” is because people generally claim more synergistic benefits than will come. Yes, it exists, but there are so many false promises. Berkshire is full of synergies— we don’t avoid synergies, just claims of synergies.”

• “Beta and modern portfolio theory and the like— none of it makes any sense to me. We’re trying to buy businesses with sustainable competitive advantages at a low, or even a fair, price. How can professors spread this [nonsense that a stock’s volatility is a measure of risk]?”
“People have always had this craving to have someone tell them the future. Long ago, kings would hire people to read sheep guts. There's always been a market for people who pretend to know the future. Listening to today's forecasters is just as crazy as when the king hired the guy to look at the sheep guts.”

“The Greek orator was clearly right about an excess of optimism being the normal human condition, even when pain or the threat of pain is absent. Witness happy people buying lottery tickets or believing that credit-furnishing, delivery-making grocery stores were going to displace a great many superefficient cash-and-carry supermarkets.”

Designing Good Systems with Incentives

“I have a friend who made an industrial product at a plant in Texas not far from the border. He was in a low-margin, tough business. He got massive fraud in the workers’ compensation system—to the point that his premiums reached double-digit percentages of payroll. And it was not that dangerous to produce his product. It’s not like he was a demolition contractor or something. So he pleaded with the union, “You’ve got to stop this. There’s not enough money in making this product to cover all of this fraud.” But, by then, everyone’s used to it. “It’s extra income. It’s extra money. Everybody does it. It can’t be that wrong. Eminent lawyers, eminent doctors, eminent chiropractors—if there are any such things—are cheating.” So my friend closed his plant and moved the work to Utah among a community of believing Mormons. Well, the Mormons aren’t into workers’ compensation fraud—at least they aren’t in my friend’s plant. And guess what his workers’ compensation expense is today? It’s two percent of payroll—down from double digits. This sort of tragedy is caused by letting the slop run. You must stop slop early. It’s very hard to stop slop and moral failure if you let it run for a while.”

“If I were running the civilization, compensation for stress in workers’ comp would be zero—not because there’s no work-caused stress, but because I think the net social damage of allowing stress to be compensated at all is worse than what would happen if a few people that had real work-caused stress injuries went uncompensated I like the Navy system. If you’re a captain in the Navy and you’ve been up for twenty-four hours straight and have to go to sleep and you turn the ship over to a competent first mate in tough conditions and he takes the ship aground—clearly through no fault of yours—they don’t court-martial you, but your naval career is over. It doesn’t matter why your ship goes aground, your career is over. Nobody’s interested in your fault. It’s just a rule that we happen to have—for the good of all, all effects considered.”

“The craving for perfect fairness causes a lot of terrible problems in system function.”

Trademarks

[Carnation was trying to buy the trademark of Carnation Fish.] “In the end, Carnation came to him sheepfacedly and said, “We’d like to put our quality control inspectors into your fish plants to make sure that your fish are perfect; and we’ll pay all the costs”—which he quickly and smirkily allowed. So he got free quality control in his fish plants—courtesy of the Carnation Company. This history shows the enormous incentive you create if you give a guy a trade-mark [he can protect]. And this incentive is very useful to the wider civilization. As you see, Carnation got so that it was protecting products that it didn’t even own.”

Passive Investing

Charlie Munger is strongly against active investment managers who take percentage of fees. One speech in Poor Charlie’s Almanack is directed at large charitable foundations and excoriating their reliance on greedy managers.
• “Even when nothing but unleveraged stock picking is involved, the total cost of all the investment management, plus the frictional costs of fairly often getting in and out of many large investment positions, can easily reach three percent of foundation net worth per annum if foundations, urged on by consultants, add new activity, year after year.”
• “And it is also inescapable that exactly half of the investors will get a result below the median result after the croupiers’ take, which median result may well be somewhere between unexciting and lousy.”
• “But, you may think, my foundation, at least, will be above average. It is well endowed, hires the best, and considers all investment issues at length and with objective professionalism. And to this I respond that an excess of what seems like professionalism will often hurt you horribly—precisely because the careful procedures themselves often lead to overconfidence in their outcome.”
• “febezzlement”—the functional equivalent of embezzlement—to explain how wealth is stripped away by layers of unnecessary investment managers and consultants
• “The study concluded that the typical mutual fund investor gained at 7.25 percent per year in a fifteen-year period when the average stock fund gained at 12.8 percent per year (presumably after expenses).”
• “Assume that 2006 stock prices rise by 200% while corporate earnings do not rise, at which point all the sensibly distributable earnings of all U.S. corporations combined amount to less than the total of all stockholder investment costs, because such costs rise proportionally with stock prices. Now, so long as this situation continues, no money at all, net of investment costs, is going out of all corporations to all corporate owners combined. Instead, frictional cost imposers get more than all sensibly distributable corporate earnings.”

Derivatives
• [in 2003] “I confidently predict that there are big troubles to come. The system is almost insanely irresponsible. And what people think are fixes aren’t really fixes. It’s so complicated I can’t do it justice here—but you can’t believe the trillions of dollars involved. You can’t believe the complexity. You can’t believe how difficult it is to do the accounting. You can’t believe how big the incentives arc to have wishful thinking about values and wishful thinking about ability to clear.”
• “Running off a derivative book is agony and takes time. And you saw what happened when they tried to run off the derivative books at Enron. Its certified net worth vanished. In the derivative books of America, there are a lot of reported profits that were never earned and assets that never existed.”

Wealth Effect and Booms/Busts
• “First, spending proclivity is influenced in an upward direction when stock prices go up and in a downward direction when stock prices go down...complication that increased spending tends to drive up stock prices while stock prices are concurrently driving up spending. Also, of course, rising stock prices increase corporate earnings even when spending is static, for instance, by reducing pension cost accruals after which stock prices tend to rise more.”
• “The Japanese economy, year after year, stays stalled, as Japanese proclivity to spend stubbornly resists all the tricks of the economists.”
• “A median conclusion of the economics professionals, based mostly on data collected by the Federal Reserve System, would probably be that the “wealth effect” on spending from stock prices is not all that big. After all, even now, real household net worth, excluding pensions, is probably up by less than one hundred percent over the last ten years and remains a pretty modest figure per household, while market value of common stock is probably not yet one-third of aggregate household net worth, excluding pensions.”
• “For one thing, I have been told, probably correctly, that Federal Reserve data collection, due to practical obstacles, doesn’t properly take into account pension effects, including effects from 401 (k) and similar plans.”
• “For another thing, the traditional thinking of economists often does not take into account implications from the idea of “bezzle.” After all, the embezzler spends more because he has more income, and his employer spends as before because he doesn’t know any of his assets are gone.”
• “As Keynes showed, in a native economy relying on earned income, when the seamstress sells a coat to the shoemaker for twenty dollars, the shoemaker has twenty dollars less to spend, and the seamstress has twenty dollars more to spend. There is no lollapalooza effect on aggregate spending. But when the government prints another twenty dollar bill and uses it to buy a pair of shoes, the shoemaker has another twenty dollars, and no one feels poorer. And when the shoemaker next buys a coat, the process goes on and on, not to an infinite increase, but with what is now called the Keynesian multiplier effect, a sort of lollapalooza effect on spending.”
• “You people, I think, have created a lot of “febezzle” through your foolish investment management practices in dealing with your large holdings of common stock.”
• “If a foundation, or other investor, wastes three percent of assets per year in unnecessary, nonproductive investment costs in managing a strongly rising stock portfolio, it still feels richer, despite the waste, while the people getting the wasted three percent, “febezzlers” though they are, think they are virtuously earning income.”
• “Now, toss in with “febezzlement” in investment management about $750 billion in floating, ever-growing, ever-renewing wealth from employee stock options and you get lot more common-stock-related “wealth effect” driving consumption, with some of the “wealth effect” from employee stock options being, in substance, “bezzle” effect, facilitated by the corrupt accounting practice now required by standard practice”
• “Next, consider that each one-hundred-point advance in the S&P adds about $1 trillion in stock market value, and throw in some sort of Keynesian-type multiplier effect related to all “febezzle.” The related macroeconomic “wealth effects,” I believe, become much larger than is conventionally supposed.”
• “It is an unfortunate fact that great and foolish excess can come into prices of common stocks in the aggregate. They are valued partly like bonds, based on roughly rational projections of use value in producing future cash. But they are also valued partly like Rembrandt paintings, purchased mostly because their prices have gone up, so far.”
• “Suppose all pension funds purchased ancient art, and only ancient art, with all their assets. Wouldn’t we eventually have a terrible mess on our hands, with great and undesirable macroeconomic consequences?”
• “My foregoing acceptance of the possibility that stock value in aggregate can become irrationally high is contrary to the hard-form “efficient market” theory that many of you once learned as gospel from your mistaken professors of yore. Your mistaken professors were too much influenced by “rational man” models of human behavior from economics and too little by “foolish man” models from psychology and real-world experience. “Crowd folly,” the tendency of humans, under some circumstances, to resemble lemmings, explains much foolish thinking of brilliant men and much foolish behavior - like investment management practices of many foundations represented here today. It is sad that today each institutional investor apparently fears most of all that its investment practices will be different from practices of the rest of the crowd.”
• “When stock market advances and declines are regarded as long-lasting, there is more downside force on optional consumption per dollar of stock market decline than there is upside force per dollar of stock market rise.”
• [I don’t quite follow this. Febezzlement would happen if the investor thought she had more gains than she really did (if the money were stolen for example). But because the fees are clear, the absolute returns should be clear to the investor.]
Building a Trillion Dollar Company

In Poor Charlie’s Almanack, Munger poses an interesting challenge – how to grow a trillion dollar company from scratch. He uses this as an example of explaining success from first principles, which can lead to better management and decision making.

- It is 1884 and you are given 2 million dollars. How do you grow it to be a 2 trillion dollar company? Your company name must be Coca-Cola, and you must create a non-alcoholic beverage business. Here is Charlie’s strategy.
- No brainer decisions:
  - Trademark Coca-Cola, since you’ll never make enough selling generic beverages.
  - This beverage must succeed worldwide to get the scale needed.
- Use math to size the problem:
  - By 2034, there will be 8 billion consumers. Each consumer must drink 64oz of water per day. If you capture half the market, and each person drinks 16oz of Coca-Cola a day, we can sell 2.92 trillion eight-ounce servings in 2034.
  - Then, if you net 4 cents per serving, you’ll earn $117 billion.
- Major Factors Over Time
  - Dollar will depreciate.
  - Purchasing power will rise, probably by at least 40x over 150 years.
  - Consumers’ desire to improve their drinking experience will rise.
  - Technology reduces cost of creating product.
  - Working backwards, purchasing power change implies that in 1884, we need just 0.1 cent per serving of earnings.
- Lollapalooza Required
  - To create a beverage market overtaking 1/4th of all beverage consumption, and take half the market, you must have a lollapalooza as a combination of multiple factors. Here are the factors that play:
    - Conditioned reflexes: Coca-Cola brand triggers purchase response
      - Operant conditioning: Maximize rewards of ingestion, and minimize reflexes that are extinguished by competitors.
        - Food value in calories
        - Flavor, texture, aroma acting as stimuli to consumption under evolutionary neural programming
        - Stimulus, by sugar or caffeine
        - Cooling effect when man is too hot, or warming effect when man is too cool. Cooling is better, as there aren’t as many options to cool someone as there are to heat. Also, when you are hot, you must consume much liquid.
        - To ward off competitors: you must have instantaneous availability. A competing product, if it’s never tried, can’t create a conflicting habit.
      - Classical conditioning: Associate positive things with Coca-Cola
        - Advertising associates happiness, sex, etc. with the drink
        - Color look like wine instead of sugared color
        - Carbonate water to seem like champagne
    - Social Proof
      - The more universal consumption is, the more acceptable it is, and the better the effects of consumption
      - Volume-creates-power
- Mass advertising
- Distribution

- Logistics and Distribution
  - Syrup to fountains and restaurants
  - Complete carbonated-water product in containers
    - Need many bottling plants around the world

- Pricing
  - Must set first-sale price. Any independent bottler should be a subcontractor, not a vendee of syrup
  - No perpetual franchises with pricing set forever

- Invert, always invert. What don’t we want?
  - Avoid the stop-consumption feelings of aftertaste so people drink liters of our product
  - Never lose even half of our trademark
  - Don’t cause envy, by deserving our success. Be fanatic about product quality, presentation, reasonableness of prices
  - At scale, avoid making huge and sudden changes in flavor. This would eradicate the Pavlovian conditioning, trigger deprival super-reaction, allow competitors to swoop in and replicate the flavor.

- The point to this exercise is that **most people, even having observed Coca-Cola for most of their lives, cannot explain the success of Coca-Cola. Furthermore, recent executives could not understand the fundamentals well enough to predict the failure of “New Coke.”**
  - Similarly: “General Motors recently made just such a mistake, and it was a lollapalooza. Using fancy consumer surveys, its excess of professionalism, it concluded not to put a fourth door in a truck designed to serve also as the equivalent of a comfortable five-passenger car. Its competitors, more basic, had actually seen five people enter and exit cars. Moreover, they had noticed that people were used to four doors in a comfortable five-passenger car and that biological creatures ordinarily prefer effort minimization in routine activities and don’t like removals of long-enjoyed benefits. There are only two words that come instantly to mind in reviewing General Motors’ horrible decision, which has blown many hundreds of millions of dollars. And one of those words is “oops.””

- A follow-on point is that in times of duress and need to change, don’t suddenly forget the fundamentals of the situation. Your new strategy may contravene what got you to your position.

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**Stock Options Expensing**

- Munger and Buffett both believe issuing stock options must be accounted for as part of expenses. Avoiding this inflates company earnings (which is why executives like doing it).
- Munger gives the parable of Quant Tech, a stable engineering firm whose founder dies. The new management starts a financial scheme to not report options as part of expenses. They start giving options instead of compensation, which reduces their expenses and increases earnings dramatically.
- Because of Quant Tech’s cash balances from its earlier days, its finances don’t look too suspicious. But it starts practicing active subterfuge, for instance disguising its very low income taxes by prompting foreign government clients to increase company fees while increasing foreign taxes paid.
- Because of boosted earnings and regular earnings growth, the stock prices were naturally inflated, and the holders of stock benefited from the share price. However, eventually suspicion mounts when the earnings don’t quite make sense, the real results are reported, confidence plummets, stock plummets.
- My more general takeaways from the parable are that 1) there is such a thing as true fundamental value, and good companies report this; 2) short-term greedy schemes to profit need continuous lies to perpetuate the scheme, which leads eventually to their unraveling.
- This is a good read on the matter: [https://hbr.org/2003/03/for-the-last-time-stock-options-are-an-expense](https://hbr.org/2003/03/for-the-last-time-stock-options-are-an-expense)
Charlie’s Investment Checklist

1. MEASURE RISK

All investment evaluations should begin by measuring risk, especially reputational.

- Incorporate an appropriate margin of safety
- Avoid dealing with people of questionable character
- Insist upon proper compensation for risk assumed
- Always beware of inflation and interest rate exposures
- Avoid big mistakes; shun permanent capital loss

2. BE INDEPENDENT

Only in fairy tales are emperors told they’re naked.

- Objectivity and rationality require independence of thought
- Remember that just because other people agree or disagree with you doesn’t make you right or wrong – the only thing that matters is the correctness of your analysis and judgment
- Mimicking the herd invites regression to the mean (merely average performance)

3. PREPARE AHEAD

The only way to win is to work, work, work, and hope to have a few insights.

- Develop into a lifelong self-learner through voracious reading; cultivate curiosity and strive to become a little wiser every day
- More important than the will to win is the will to prepare
- Develop fluency in mental models from the major academic disciplines
- If you want to get smart, the question you have to keep asking is “why, why, why?”

4. HAVE INTELLECTUAL HUMILITY

Acknowledging what you don’t know is the dawning of wisdom.

- Stay within a well-defined circle of competence
- Identify and reconcile disconfirming evidence
- Resist the craving for false precision, false certainties, etc.
- Above all, never fool yourself, and remember that you are the easiest person to fool

5. ANALYZE RIGOROUSLY

Use effective checklists to minimize errors and omissions.

- Determine value apart from price; progress apart from activity; wealth apart from size
- It is better to remember the obvious than to grasp the esoteric
- Be a business analyst, not a market, macroeconomic, or security analyst
- Consider totality of risk and effect; look always at potential second order and higher level impacts
- Think forwards and backwards – Invert, always invert

6. ALLOCATE ASSETS WISELY

Proper allocation of capital is an investor’s No. 1 job.
• Remember that highest and best use is always measured by the next best use (opportunity cost)
• Good ideas are rare – when the odds are greatly in your favor, bet (allocate) heavily
• Don’t “fall in love” with an investment – be situation-dependent and opportunity-driven

7. HAVE PATIENCE

Resist the natural human bias to act.

• “Compound interest is the eighth wonder of the world” (Einstein); never interrupt it unnecessarily
• Avoid unnecessary transactional taxes and frictional costs; never take action for its own sake
• Be alert for the arrival of luck
• Enjoy the process along with the proceeds, because the process is where you live

8. BE DECISIVE

When proper circumstances present themselves, act with decisiveness and conviction.

• Be fearful when others are greedy, and greedy when others are fearful
• Opportunity doesn’t come often, so seize it when it comes
• Opportunity meeting the prepared mind; that’s the game

9. BE READY FOR CHANGE

Live with change and accept unremovable complexity.

• Recognize and adapt to the true nature of the world around you; don’t expect it to adapt to you
• Continually challenge and willingly amend your “best-loved ideas”
• Recognize reality even when you don’t like it – especially when you don’t like it

10. STAY FOCUSED

Keep it simple and remember what you set out to do.

• Remember that reputation and integrity are your most valuable assets – and can be lost in a heartbeat
• Guard against the effects of hubris and boredom
• Don’t overlook the obvious by drowning in minutiae
• Be careful to exclude unneeded information or slop: “A small leak can sink a great ship”
• Face your big troubles; don’t sweep them under the rug

Sample Problems

Charlie Munger likes giving riddles to the audience to apply the principles he’s talking sharing. Here is a Poor Charlie’s Almanack summary of several from the book:

• Business from first principles and inversion
  o “Berkshire Hathaway just opened a furniture and appliance store in Kansas City, Kansas. At the time Berkshire opened it, the largest selling furniture and appliance store in the world was another Berkshire Hathaway store, selling $350 million worth of goods per year. The new store in a strange city opened up selling at the rate of more than $500 million a year. From the day it opened, the 3,200 spaces in the parking lot were full. The women had to wait outside the ladies restroom because the architects didn’t understand biology. It’s hugely successful.”
“Now, tell me what explains the runaway success of this new furniture and appliance store that is outselling everything else in the world?”

“Well, let me do it for you. Is this a low-priced store or a high-priced store? It’s not going to have a runaway success in a strange city as a high-priced store. That would take time. Number two, if it’s moving $500 million worth of furniture through it, it’s one hell of a big store, furniture being as bulky as it is. And what does a big store do? It provides a big selection. So what could this possibly be except a low-priced store with a big selection.”

“But, you may wonder, why wasn’t it done before, preventing its being done first now? Again, the answer just pops into your head: It costs a fortune to open a store this big. So, nobody's done it before. So, you quickly know the answer. With a few basic concepts, these microeconomic problems that seem hard can be solved much as you put a hot knife through butter.”

Example 2

“Now I’ll give you a harder problem. There’s a tire store chain in the Northwest that has slowly succeeded over fifty years, the Les Schwab tire store chain. It just ground ahead. It started competing with the stores that were owned by the big tire companies that made all the tires, the Goodyears and so forth. And, of course, the manufacturers favored their own stores. Their “tied stores” had a big cost advantage. Later, Les Schwab rose in competition with the huge price discounters like Costco and Sam’s Club and before that Scars, Roebuck and so forth. And yet, here is Schwab now, with hundreds of millions of dollars in sales. And here’s Les Schwab in his eighties, with no education, having done the whole thing. How did he do it? I don’t see a whole lot of people looking like a light bulb has come on. Well, let’s think about it with some microeconomic fluency.”

“Is there some wave that Schwab could have caught? The minute you ask the question, the answer pops in. The Japanese had a zero position in tires, and they got big. So this guy must have ridden that wave some in the early times. Then, the slow following success has to have some other causes happened here, obviously, is this guy did one hell of a lot of things right. And among the things that he must have done right is he must have harnessed what Mankiw calls the superpower of incentives. He must have a very clever incentive structure driving his people. And a clever personnel selection system, etc. And he must be pretty good at advertising. Which he is. He’s an artist. So, he had to get a wave in Japanese tire invasion, the Japanese being as successful as they were. And then a talented fanatic had to get a hell of a lot of things right and keep them right with clever systems. Again, not that hard of an answer.”

How can you increase volume by increasing price?

1. Luxury goods: Raising the price can improve the product’s ability as a ‘show-off’ item, i.e., by raising the price the utility of the goods is improved to someone engaging in conspicuous consumption. Further, people will frequently assume that the high price equates to a better product, and this can sometimes lead to increased sales.

2. Non-luxury goods: same as second factor cited above, i.e., the higher price conveys information assumed to be correct by the consumer, that the higher price connotes higher value. This can especially apply to industrial goods where high reliability is an important factor.

3. Raise the price and use the extra revenue in legal ways to make the product work better or to make the sales system work better.

4. Raise the price and use the extra revenue in illegal or unethical ways to drive sales by the functional equivalent of bribing purchasing agents or in other ways detrimental to the end consumer, i.e., mutual fund commission practices. [This is the answer I like the most, but never get.]”
On Character and Living a Good Life

In all, Charlie Munger seems like a man of solid character, hard-working, humble, and always learning. Here’s a summary organizing his major thoughts on quality traits leading to a happy and productive life.

Key Biography Points

- Charlie worked for Buffett’s grandfather in a grocery store. Warren worked there a few years later.
- Charlie liked raising hamsters and traded them with other kids – early negotiating practice.
- Was captain of his high school’s varsity rifle team
- Started as lawyer, was admitted to and graduated from Harvard Law School without a bachelor’s
- Developed real estate and started new law firm
- Charlie returned to Omaha when father died and met Warren at a dinner party. Warren convinced Charlie law was a bad use of talent.
- Charlie started an investing partnership, Wheeler, Munger; showed return over 14 years of 19.8% vs 5% for Dow.
- Joined Berkshire Hathaway after deciding he didn’t want to manage funds directly for investors, and instead to build equity through a holding company. He liquidated Wheeler, Munger and had shared in Blue Chip Stamps and Diversified Retailing, which then converted into Berkshire Hathaway stock

How to Live Happily

- “Have low expectations. Have a sense of humor. Surround yourself with the love of friends and family.”
- “Each of us must figure out his or her own lifestyle. You may want to work seventy hours a week for ten years to make partner at Cravath and thereby obtain the obligation to do more of the same.”
- “The safest way to try to get what you want is to try to deserve what you want.”
- Avoid self-pity. “I had a friend who carried a thick stack of linen-based cards. And when somebody would make a comment that reflected self-pity, he would slowly and portentously pull out his huge stack of cards, take the top one and hand it to the person. The card said, “Your story has touched my heart. Never have I heard of anyone with as many misfortunes as you.” Self-pity is always counterproductive. It’s the wrong way to think. And when you avoid it, you get a great advantage over everybody else, or almost everybody else, because self-pity is a standard response.”
- “Perverse associations are also to be avoided. You particularly want to avoid working directly under somebody you don’t admire and don’t want to be like.”
- “Assiduity. I like that word because to me it means: “Sit down on your ass until you do it.””
  - “Two partners that I chose for one phase in my life made the following simple agreement when they created a little design / build construction team in the middle of the great depression: “Two-man partnership,” they said, “and divide everything equally. And, whenever we’re behind in our commitments to other people, we will both work fourteen hours a day, seven days a week, until we’re caught up.” Well, needless to say, that firm didn’t fail. And my partners were widely admired. Simple, old-fashioned ideas like theirs are almost sure to provide a good outcome.”
- “Who wants to go through life anticipating trouble? Well, I did, trained as I was. I’ve gone through a long life anticipating trouble.”
How to Live Miserably

- [building on Johnny Carson, an example of ‘invert, always invert’]
- 1. Ingesting chemicals in an effort to alter mood or perception
- 2. Envy
- 3. Resentment
  - “Disraeli, as he rose to become one of the greatest prime ministers, learned to give up vengeance as a motivation for action, but he did retain some outlet for resentment by putting the names of people who wronged him on pieces of paper in a drawer. Then, from time to time, he reviewed these names and took pleasure in noting the way the world had taken his enemies down without his assistance.”
- 4. Be unreliable
- Don’t learn from others’ mistakes. Use your own experience
- Become as non-educated as you reasonably can.
- Stay down when you get your first, second, or third severe reverse in the battle of life.

Moral Character and Honesty

- “When you borrow a man’s car, you always return it with a full tank of gas.” People notice these little things
- “I think track records are very important. If you start early trying to have a perfect one in some simple thing like honesty, you’re well on your way to success in this world.”
- “Trickery and treachery are the practices of fools that have not the wits enough to be honest.” – Benjamin Franklin
- “We believe there should be a huge area between everything you should do and everything you can do without getting into legal trouble. I don’t think you should come anywhere near that line. We don’t deserve much credit for this. It helps us make more money. I’d like to believe that we’d behave well even if it didn’t work. But more often, we’ve made extra money from doing the right thing.”
- “What’s the best way to get a good spouse? The best single way is to deserve a good spouse because a good spouse is by definition not nuts.”
- “You don’t want to be like the motion picture executive who had many people at his funeral, but they were there just to make sure he was dead. Or how about the guy who, at his funeral, the priest said, ‘Won’t anyone stand up and say anything nice about the deceased?’ and finally someone said, ‘Well, his brother was worse.’”
- “It’s hard for an empty sack to stand upright.” – Benjamin Franklin

Charlie’s Parenting Style

- His kids comment on his hard-working, perpetually reading, absent-minded nature. But they speak well of his lessons on character, good decision making, and discipline. All seem grateful for the parenting.
- “His favorite educational tools were the Morality tale, in which someone faced an ethical problem and chose the correct path, and the Downward Spiral Tale, in which someone made the wrong choice and suffered an inevitable series of catastrophic personal and professional losses...His Morality Tales were more straightforward. I remember the story my dad told his kids, then ranging from age five to twenty-five, about a financial officer at one of his companies who made a mistake that resulted in the loss of hundreds of thousands of dollars to the company. As soon as this officer realized his mistake, he went immediately to the president of the company and told him about it. My dad told us that the president then said, “This was a terrible mistake, and we don’t want you ever to make another one like it. But people make mistakes, and we can forgive that. You did the right thing, which was to admit your mistake. If you had tried to hide the mistake, or cover it up for even a short time, you would be out of this company. As it is, we’d like you to stay.” “ – Charles Munger Jr
Don’t Cheat

- Warren Buffett hates adjusted earnings and not counting stock as compensation. “A CEO who, as his company revved up to go public, asked prospective auditors, “What is two plus two?” The answer that won the assignment, of course, was, “What number do you have in mind?”” – Warren Buffett, 2016 BRK shareholder letter
- “if you mix raisins with turds, you’ve still got turds. There is nothing in accounting that can prevent unscrupulous managers from engaging in a chain-letter type fraud.”
- “I think that, every time you see the word EBITDA [earnings before interest, taxes, you should substitute the words “bullshit earnings.”

Patience and Calm

- ‘All of humanity's problems stem from man's inability to sit quietly in a room alone.’ “It’s waiting that helps you as an investor, and a lot of people just can’t stand to wait.”
- “A few major opportunities, clearly recognizable as such, will usually come to one who continuously searches and waits, with a curious mind that loves diagnosis involving multiple variables. And then all that is required is a willingness to bet heavily when the odds are extremely favorable, using resources available as a result of prudence and patience in the past.”
- “Look at those hedge funds— you think they can wait? They don't know how to wait! In my personal portfolio, I have sat for years at a time with $10 to $12 million in treasuries or municipals, just waiting, waiting....”
- “There are worse situations than drowning in cash and sitting, sitting, sitting. I remember when I wasn’t awash in cash — and I don’t want to go back.”

Benefits of Old Age

- Agamemnon in the war on Troy “never once wished for ten more men with the strength of Ajax but, instead, wanted ten more with the wisdom of Nestor.”
- “it is unworthy that an old man would work to improve only what he would live to enjoy. For him the only life worth living is dedicated in substantial part to good outcomes one cannot possibly survive to see.”
- “The best Armour of Old Age is a well-spent life preceding it; a Life employed in the Pursuit of useful Knowledge, in honourable Actions and the Practice of Virtue: in which he who labours to improve himself from his Youth, will in Age reap the happiest Fruits of them; not only because these never leave a Man, not even in the extremeast [sic] Old Age; but because a Conscience bearing Witness that our Life was well-spent, together with the Remembrance of past good Actions, yields an unspeakable Comfort to the Soul.” - Cicero

Good Work

- “The best source of new legal work is the work on your desk.”
- “What matters most: passion or competence that was inborn? Berkshire is full of people who have a peculiar passion for their own business. I would argue passion is more important than brain power.”
- “We read a lot. I don’t know anyone who's wise who doesn’t read a lot. But that’s not enough: You have to have a temperament to grab ideas and do sensible things. Most people don’t grab the right ideas or don’t know what to do with them.”
• “McDonald’s is one of our most admirable institutions. McDonald’s, providing first jobs to millions of teenagers, many troubled, over the years, has successfully taught most of them the one lesson they most need: to show up reliably for responsible work. Then I usually go on to say that if the elite campuses were as successful as McDonald’s in teaching sensibly, we would have a better world.”

**Constant Learning**

• “In my whole life, I have known no wise people (over a broad subject matter area) who didn’t read all the time — none, zero. You’d be amazed at how much Warren reads — and at how much I read. My children laugh at me. They think I’m a book with a couple of legs sticking out.”
• “Spend each day trying to be a little wiser than you were when you woke up. Discharge your duties faithfully and well. Slug it out one inch at a time, day by day. At the end of the day— if you live long enough— most people get what they deserve.”
• “I am a biography nut myself. And I think when you’re trying to teach the great concepts that work, it helps to tie them into the lives and personalities of the people who developed them. I think you learn economics better if you make Adam Smith your friend.”
• “He wants to get to the bottom of everything, whether it’s something of serious interest to him or not. Anything that comes to his attention, he wants to know more about it and understand it and figure out what makes it tick.” – Roy Tolles
• “When a better tool (idea or approach) comes along, what could be better than to swap it for your old, less useful tool?”
• “You need to have a passionate interest in why things are happening. That cast of mind, kept over long periods, gradually improves your ability to focus on reality. If you don’t have that cast of mind, you’re destined for failure even if you have a high I.Q.”
• “Rapid advance of civilization came only when man “invented the method of invention.” He was referring to the huge growth in GDP per capita and many other good things we now take for granted. Just as civilization can progress only when it invents the method of invention, you can progress only when you learn the method of learning.”
• “If you want to improve, be content to be thought foolish and stupid.” – Epictetus
• “Curiosity, concentration, perseverance, and self-criticism.” – Einstein

**How to Learn**

• “Good literature makes the reader reach a little for understanding. Then, it works better. You hold it better. It’s the commitment and consistency tendency. If you’ve reached for it, the idea’s pounded in better.”
• “Well if you're like me, it’s kind of fun for it to be a little complicated. If you want it totally easy and laid out, maybe you should join some cult that claims to provide all the answers. If you figure it out and do the outlining yourself, the ideas will stick better than if you memorize ‘em using somebody else’s cram list.”
• “I’m always asked this question: “Spoon-feed me what you know.” And, of course, what they’re often saying is, “Teach me now to get rich with soft white hands faster. And not only let me get rich faster, but teach me faster, too.””
• “It is not the possession of truth, but the success which attends the seeking after it, that enriches the seeker and brings happiness to him.” - Max Planck
• “You need a different checklist and different mental models for different companies. I can never make it easy by saying, ‘Here are three things.’ You have to derive it yourself to ingrain it in your head for the rest of your life.”
• Soft science should integrate the ethos of hard science:
Rank and use disciplines in order of fundamentalness
- Master to tested fluency and routinely use the essential parts of all four constituents of the fundamental four-discipline combination, with attention given to disciplines more fundamental than your own.
- Use a “principle of economy” to explain things in the most fundamental principles possible.
- When step 3 doesn’t produce useful insight, hypothesize and test new principles. But do not use new principles inconsistent with the old one, unless you can prove the old principle is not true.

Training a Fighter Pilot
Training pilots has 6 elements. Munger suggests scaling this for multidisciplinary learning overall:

1. His formal education is wide enough to cover practically everything useful in piloting.
2. His knowledge of practically everything needed by pilots is not taught just well enough to enable him to pass one test or two; instead, all his knowledge is raised to practice-based fluency, even in handling two or three intertwined hazards at once.
3. Like any good algebraist, he is made to think sometimes in a forward fashion and sometimes in reverse; and so he learns when to concentrate mostly on what he wants to happen and also when to concentrate mostly on avoiding what he does not want to happen.
4. His training time is allocated among subjects so as to minimize damage from his later malfunctions; and so what is most important in his performance gets the most training coverage and is raised to the highest fluency levels.
5. “Checklist” routines are always mandatory for him.
6. Even after original training, he is forced into a special knowledge maintenance routine: regular use of the aircraft simulator to prevent atrophy through long disuse of skills needed to cope with rare and important problems.

His suggestions for improving multidisciplinary learning:
- Make many more courses mandatory.
- Allow for problem-solving that cross several disciplines.
  - Example: Two old ladies inherit a shoe factory making branded shoes and have all sorts of business problems. What do you counsel?
  - Wrong answer: Pages of advice on how to solve the problems.
  - Correct answer: Sell the company, because this is out of your league and you’ll have agency costs.
  - Similar example: the Stanford MBA class where students were given $10 and told to maximize profits from it, then present for 10 minutes on their plan. Many tried to use it to buy cheap goods and resell, like ice water. Some realized the real value was their time, which they sold by standing in line at restaurants and such. The winning team sold the 10 minute slot to a company to recruit MBAs.
  - This could also be solved using the Invert rule – how do you maximize value to the two old ladies at the end of the day?

Focus
- “Fathers ability to Chinese wall off the most intrusive distractions from whatever mental task he was engaged in— a practice alternately amusing and irritating if you were trying to get his attention— accounts as much as anything else for his success.” – David Borthwick
- “He knows how to take all of his brains and all of his energy and all of his thought and focus exactly on a single problem, to the exclusion of anything else. People will come into the room and pat him on the back or offer him another cup of coffee or something, and he won’t even acknowledge their presence because he is using one hundred percent of his huge intellect.” – Glen Mitchel
“To hell with it. We’re either going to be #1 or #2 in every field we’re in or we’re going to be out. I don’t care how many people I have to fire and what I have to sell. We’re going to be #1 or #2 or out.” – Jack Welch

**Partnering**
- Warren Buffett: “Look for someone both smarter and wiser than you are. Ask him not to flaunt his superiority so that you may enjoy acclaim for many accomplishments that sprang from his thoughts and advice. Seek a partner who will never second-guess you nor sulk when you make expensive mistakes. Look also for a generous soul who will put up his own money and work for peanuts. Finally, join with someone who will constantly add to the fun as you travel a long road together.”
- Warren Buffett: “A partner who is not subservient, who is himself extremely logical, is one of the best mechanisms you can have.”
- “People couldn’t believe that I suddenly made myself a subordinate partner to Warren, but there are some people that it is okay to be a subordinate partner to. I didn’t have the kind of ego that prevented it. There are always people who will be better at something than you. You have to learn to be a follower before you become a leader.”

**Humor to convey points**
- On Buffett’s teachings: “his words are often made more acceptable through use of insightful humor.”
- His going along with normal social customs and his sense of humor, he said, were what allowed his otherwise sometimes prickly temperament to harmonize with other people.

**Durability**
- “Durability has always been a first-rate virtue in my father’s view, along with ritual and tradition. He never had a desire to change his primary habits, sartorial or otherwise, once he had, like Franklin, acquired them.” – Philip Munger
- “Change, as in the case of the Internet, can be the friend of society. But it is the absence of change that is often the friend of the investor. While the Internet will change many things, it will not likely change the brand of gum people chew. Charlie and I like stable businesses like chewing gum and try to leave life’s more unpredictable things to someone else.” – Warren Buffett
Miscellaneous
Here’s a set of miscellaneous points I’m including in this Poor Charlie’s Almanack summary for completion.

Being Persuasive

- Captain Cook and Scurvy
  - “At the time, scurvy was the dread of the long voyage. Captain Cook noticed that Dutch ships had less scurvy than English ships on long voyages. So he said, “What are the Dutch doing that’s different?” And he noticed they had all these barrels of sauerkraut. So he laid in all this sauerkraut, which, incidentally, happens to contain a trace of vitamin C. But English sailors were a tough, cranky, and dangerous bunch in that day. They hated “krauts.” And they were used to their standard food and booze. So how do you get such English sailors to eat sauerkraut?
  - “Well, Cook didn’t want to tell ’em that he was doing it in the hope it would prevent scurvy—because they might mutiny and take over the ship if they thought that he was taking them on a voyage so long that scurvy was likely. So here’s what he did: Officers ate at one place where the men could observe them. And for a long time, he served sauerkraut to the officers, but not to the men. And, then, finally, Captain Cook said, “Well, the men can have it one day a week.” In due course, he had the whole crew eating sauerkraut.”

- Advising morally bad clients
  - “For instance, suppose you’ve got a client who really wants to commit tax fraud. If he doesn’t push the tax law way beyond the line, he can’t stand it. He can’t shave in the morning if he thinks there’s been any cheating he could get by with that he hasn’t done. And there arc people like that. They just feel they aren’t living aggressively enough.
  - “You can approach that situation in either of two ways: (A) You can say, “I just won’t work for him,” and duck it. Or. (B) you can say, “Well, the circumstances of my life require that I work for him. And what I’m doing for him doesn't involve my cheating. Therefore, I'll do it.” And if you see he wants to do something really stupid, it probably won’t work to tell him, “What you’re doing is bad. I have better morals than you.” That offends him. You’re young, lie’s old. Therefore, instead of being persuaded, he’s more likely to react with, “Who in the hell are you to establish the moral code of the whole world?”
  - “But, instead, you can say to him, “You can’t do that without three other people beneath you knowing about it. Therefore, you’re making yourself subject to blackmail. You're risking your reputation. You’re risking your family, your money, etc.”
  - “Appealing to his interest is likely to work better as a matter of human persuasion than appealing to anything else.”

- “Once you know how to do it, there are real moral limits regarding how much you should do it. Not all of what you know how to do should you use to manipulate people. if you're willing to transcend the moral limits and the person you're trying to manipulate realizes what you're doing because he also understand the psychology, he'll hate you.”

Problems with Economics

- Hammer and nail problem – “Well, practically everybody (1) overweighs the stuff that can be numbered because it yields to the statistical techniques they’re taught in academia and (2) doesn’t mix in the hard-to-measure stuff that may be more important.”

- Physics envy – a craving for unattainable precision, which leads to messes like perfect rationality in markets
• "Economics professors are most economical with ideas. They make a few they learned in graduate school last a lifetime"

• Not incorporating virtues and vices
  o “Envy was a great driver of proclivity to spend. And so, here’s this terrible vice, which is forbidden in the Ten Commandments, and here it’s driving all these favorable results in economics. There’s some paradox in economics that nobody’s going to get out.”

Problems with Psychology

• “Psychology to me, as currently organized, is like electromagnetism after Faraday, but before Maxwell —a lot has been discovered, but no one mind has put it all together in proper form.”

• [On missing multiple causes of Milgram’s prison experiment.] “For years, it was in the psychology books as a demonstration of authority—how authority could be used to persuade people to do awful things. Of course, that’s mere first-conclusion bias. That’s not the complete and correct explanation. Authority is part of it. However, there were also quite a few other psychological principles, all operating in the same direction, that achieved that lollapalooza effect precisely because they acted in combination toward the same end.”

• “How can smart people be so wrong? Well, the answer is that they don’t do what I’m telling you to do—which is to take all the main models from psychology and use them as a checklist in reviewing outcomes in complex systems. If they used a checklist, they’d realize the Milgram experiment harnesses six psychological principles, at least—not three. All they’d have to do is to go down the checklist to see the ones that they missed.”

• “I don’t believe that psychology professors in America are people whose alternative career paths were in the toughest part of physics. And that may be one of the reasons why they don’t get it quite right. Will such a super-gifted person instead choose academic psychology wherein lie very awkward realities: (A) that the tendencies demonstrated by social psychology paradoxically grow weaker as more people learn them, and, (B) that clinical (patient-treating) psychology has to deal with the awkward reality that happiness, physiologically measured, is often improved by believing things that are not true?”

• “When something was obvious in life but not easily demonstrable in certain kinds of easy-to-do, repeatable academic experiments, the truffle hounds of psychology very often missed it.”

Other Checklists

• Two-track analysis
  o What are the factors that really govern the interests involved, rationally considered? (eg microeconomics)
  o What are the subconscious influences, where the brain at a subconscious level is automatically forming conclusions?

• Problem-Solving notions
  o Decide the big no-brainer questions first
  o Apply numerical fluency
  o Invert
  o Apply elementary multidisciplinary wisdom, never relying entirely upon others
  o Watch for combinations of factors – the Lollapalooza effect

Miscellaneous Points

• On asbestos and tort
"What’s happened in asbestos is that a given group of people get mesothelioma—a horrible cancer that comes only from asbestos exposure and kills people. Then, there’s another group of claimants who smoked two packs of cigarettes a day and have a spot on their lung. Then you get a lawyer who gets a doctor to testify that every spot is caused by asbestos. Once you effectively bribe a doctor, then you can get millions of people to sue on fears of getting cancer. But there’s not enough money [to pay all of the claimants], so people who are truly harmed don’t get enough...Once wrongdoers get rich, they get enormous political power and you can’t stop it, so the key is to nip things like this in the bud. It would be easy to fix the problem: The right way is to say we’re not going to pay off all these little claims."

- On Microsoft and antitrust
  - “Every business tries to turn this year’s success into next year’s greater success. It’s hard for me to see why Microsoft is sinful to do this. If it’s a sin, then I hope all of Berkshire Hathaway’s subsidiaries are sinners.”
- “When you mix raisins and turds, you’ve still got turds.” (Used repeatedly to reference immoral accounting, tech com benefits vs stock speculation.)
- On why lawyers can have bad clients
  - “My father had another client who was a blowhard, overreaching, unfair, pompous, difficult man. And I must have been fourteen years old or thereabouts when I asked, “Dad, why do you do so much work for Mr. X—this overreaching blowhard—instead of working more for wonderful men like Grant McFayden?” My father said, “Grant McFayden treats his employees right, his customers right, and his problems right. And if he gets involved with a psychotic, he quickly walks over to where the psychotic is and works out an exit as fast as he can. Therefore, Grant McFayden doesn’t have enough remunerative law business to keep you in Coca-Cola. But Mr. X is a walking minefield of wonderful legal business.”

Charlieisms (Funny Quotes)
- “I have nothing to add.”
- “I’m right, and you’re smart, and sooner or later you’ll see I’m right.”
- Warren would frequently call up Charlie and say, ‘I’m thinking of doing something’ and describe it, and Charlie would say, ‘My God, are you kidding? There’s this risk and that risk.’ They’d go right through all these risks that Charlie saw, and Warren would usually say, ‘I think you’re right.’ But once in a while, he would say, ‘Charlie, I’ve heard everything you said, but I think I’m going to go ahead.’ Warren said that it wasn’t until that instant that he’d learn what Charlie really thought because occasionally Charlie would respond, ‘Warren, if you do it, could I have a percentage of it?’
- “If mutual fund directors are independently then I’m the lead character in the Bolshoi Ballet.”
- “If you don’t get this elementary, but mildly unnatural, mathematics of elementary probability into your repertoire, then you go through a long life like a one-legged man in an ass-kicking contest.”
- [about why investment advisers are bad but still get business] guy who sold fishing tackle. I asked him, “My God, they’re purple and green. Do fish really take these lures?” And he said, “Mister, I don’t sell to fish.”
- “The fun never stops. I suppose that it does stop eventually when you’re drooling in the convalescent home at the end.”
- “The company that needs a new machine tool, and hasn’t bought it, is already paying for it.”
- Hiring professors with extreme political ideologies “made regain of objectivity almost as unlikely as regain of virginity.”
- “The happier mental realm I recommend is one from which no one willingly returns. A return would be like cutting off one’s hands.”
- “I don’t use formal projections. I don’t let people do them for me because I don’t like throwing up on the desk.”
• On accountants who set up an incentive structure that rewarded destructive lending practices: “These people became the equivalent of an armored car cash-carrying service that suddenly decided to dispense with vehicles and have unarmed midgets hand-carry its customers’ cash through slums in open bushel baskets.”
• “To say accounting for derivatives in America is a sewer is an insult to sewage.”

Other Quotes
• “Not ignorance, but ignorance of ignorance is the death of knowledge.” – Alfred Whitehead
• “The ‘silly’ question is the first intimation of some totally new development.” – Alferd Whitehead
• “There is no limit to what a man can do or where he can go if he doesn’t mind who gets the credit.” – Robert Woodruff