Being Logical summary

A healthy respect for the firm factualness of the world in which we live, for logic is about reality.

Familiarity causes us to make careless judgments about facts right before our eyes. We misread a situation because we are skimming it.

Attention demands an active, energetic response to every situation, to the persons, places, and things that make up the situation.

It is impossible to be truly attentive and passive at the same time.

Don't just look, see.

Don't just hear, listen.

Train yourself to focus on details. The little things are not to be ignored, for it is just the little things that lead us to the big things.

If we cannot establish factualness by direct evidence, we must rigorously test the authenticity and reliability of whatever indirect evidence.

Our ideas are the means, not the ends, of our knowledge. They link us to the world. If they are clear ideas, the links are strong.

The most efficient way to clarify our ideas is to look through them to the objects they represent.

Our ideas owe their existence to things outside and independent of the mind, to which they refer: objective facts.

Our ideas are clear, and our understanding of them is clear, only to the extent that we keep constant tabs on the things to which they refer.

The focus must always be on the originating sources of our ideas in the objective world.

No idea, even the most bizarre, can completely sever its ties with the objective world, but ideas can become so remote from that world that their relation to it is difficult to see.

Ideas as such are not communicable from one mind to another. They have to be carefully fitted to words, so that the words might communicate them faithfully.

It is impossible to have clear communication without clear thinking. How can I give you a clear idea of something if it is not first clear in my own mind?

True statements of objective fact are not open to argument; evaluative statements are. If I want an evaluative statement to be accepted, I must argue for it.

A word is vague if its referent is blurred. We do not know precisely what the word is pointing to. Consider the two statements "People don't like music like that" and "They say he will not run for a second term."

The more general the word, the vaguer it is. A sure preventative against vagueness, is to make your words as precise and sharply focused as possible.

Before you attempt to persuade an audience that a certain situation is unfair, tell them what you mean by unfairness.

The whole purpose of reasoning, of logic, is to arrive at the truth of things.

The definition of a statement: a linguistic expression to which the responses "true" or "false" would be appropriate. To affirm a statement is to declare it to be true; to deny it is to brand it as false.

A science is any organized body of knowledge that is possessed of first principles. The first principles of any science are those fundamental truths upon which the science is founded and by which all its activities are informed.

Reality is not a homogenous mass. It is a composition of individuals, and the individuals are distinguishable from one another.

Stated: Between being and nonbeing there is no middle state. Explanation: Something either exists or it does not exist; there is no halfway point between the two.

How about becoming? Isn't the state of becoming between those of being and nonbeing? The answer is no. There is no such thing as just becoming; there are only things that become. The state of becoming is already within the realm of existence.

Stated: There is a sufficient reason for everything.

What is implied in the principle is that nothing in the physical universe is self-explanatory or the cause of itself. (For a thing to be a cause of itself, it would somehow have to precede itself, which is absurd.)

If the primary purpose of logic is to attain the truth, then it is evident that nothing could be more important than avoiding the opposite of truth.

Rationalization is reasoning in the service of falsehood.

There are times when we hold contradictory views and we know it.

What I do, assuming the first statement reflects objective facts, is suppress the second statement. Another way I can allow myself to hold on to statements that contradict the facts is deliberately to refrain from examining the facts to which the statements refer.

Some people become so fixated upon life's gray areas that they eventually succeed in convincing themselves that there is nothing but gray areas. A little realism is in order here. We must recognize that many things are, in fact, clearly and sharply defined, and not to see that is simply not to see clearly.

A situation in which you see no clear alternatives does not mean, objectively considered, that there are no clear alternatives. It simply means that you do not see them. Don't project your subjective state of uncertainty upon the world at large and claim objective status for it.

You may, right now, be uncertain about a particular matter, but that experience is only possible because you have known the opposite experience, the experience of being certain about something.

A negative can only be recognized as a negative - "uncertainty" - because its positive opposite is already known.

There's an Explanation for Everything, Eventually

The principle of sufficient reason tells us that things don't just happen. They are caused to happen. We do not know the causes of everything, but we know that everything has a cause.

To know the causes of things is to have a truly profound understanding of them.

To know causes is to be able to control them, and to control causes is to control effects.

B is clearly the immediate cause of C, so if C is problematical, that means there is something problematical about B. But because B is itself an effect, whatever is problematical about it is to be traced to its cause A. The problem with C will not be effectively addressed, then, until the ultimate source of the problem with A is taken care of.

When we define something, what we are attempting to do is simply identify it more precisely - first by grouping it with other things that are generally similar to it, then by noting what is unique to it (the specific difference) in comparison with the other things in the group.

Step 1: "Justice is a social virtue..."

Step 2: "...by which each individual renders to all others what is due to them."

Step 1: "Fear is an emotion..."

Step 2: "...that causes us to withdraw from perceived danger."

I am not reasoning with you if I simply say that such-and-such is true and expect you to accept it as true only on my say-so. I must show you that such-and-such is true, and I do that by making an argument. An argument will only be as good as the statements of which it is composed, and those statements, in turn, will only be as good as the terms of which they are composed.

## The most effective arguments are those that are trying to make a single point.

Negative statements can be effectively used as corrective responses to false statements. "Not every artist is a neurotic."

The "totally unlike" judgment would be justified by the fact that the two things being compared have no observable features in common. But is that ever the case?

Skepticism, as a permanent attitude, is to be avoided.

The extreme skeptic proclaims baldly that there is no truth. This is obviously a self-contradictory position, for if there is no truth there is no standard by which that very claim can be assessed, and the skeptic's statement is empty of meaning.

An agnostic is someone who maintains that he lacks enough knowledge regarding a particular issue to be able to make a definite judgment about it.

It is one thing to say "I don't know" after long and assiduous research into a subject. It is quite another to say "I don't know" when you haven't even bothered to look into the matter. The person who succumbs to evasive agnosticism uses ignorance as an excuse rather than a reason. Such ignorance is the result of indifference or laziness.

A cynic is someone who makes emphatically negative estimates without sufficient evidence. A naïve optimist is someone who makes emphatically positive estimates without sufficient evidence. Both represent illogical positions.

An open mind, like an open mouth, should eventually close on something. A healthy open-mindedness does not mean that one is indiscriminately open to everything. To be noncommittal in a situation that demands commitment is no virtue. To be tolerant of everything is to value nothing.

Never appeal directly to people's emotions. Devote your efforts to bringing them to the point where they can see for themselves what is the case.

A favourite tactic of fallacious reasoning is to circumvent sound reasoning by appealing directly to the emotions.

The Principal Forms of Illogical Thinking

 $A \rightarrow B$ . - A therefore -B. If Louise is running, then she is moving. Louise is not running. Therefore, she is not moving.

 $A \rightarrow B$ . B therefore A. If Louise is running, then she is moving. Louise is moving. Therefore, she is running.

It is argument, not just the word of the experts, which should be carrying the authoritative weight. If we are satisfied with only the word of the experts, we are essentially being told: "Don't ask any questions, just do as we say." The strongest kind of expert evidence incorporates the reasons the experts advance for holding a certain position.

In the strictest sense, no quality can be quantified, since if quality could be perfectly translated into quantity there would be no basis for the distinction between the two in the first place.

It is not enough to take things apart; we have to put them back together again.

Ed likes to dismantle cars. He has succeeded in taking any number of them apart, but to date he has not managed to put one back together again and get it running.

From this we can confidently conclude that Ed doesn't really know all that much about cars.

He can analyze them, but he can't synthesize them.

Getting people to laugh at an argument can serve as a powerful way of dismissing it, but this may have nothing to do with the intrinsic worth of the argument.

An Inability to Disprove Does Not Prove:

The fact that there is no concrete proof against a position does not constitute an argument in favor of the position.

I cannot claim to be right simply because you can't prove me to be.

The fallacy of the false dilemma:

In a situation entailing several possibilities, I attempt to persuade you that there are only two.