Modes of the Finite

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Part Seven

Modes of Development

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Inanimate Evolution

Chapter 1

The hypothesis

This part could take a whole three or four volumes by itself, since it is supposed to be an overview of what happened from the first moment of the Big Bang (if that's how everything started) right up to the present; but I'm just not up to that, even supposing I had twenty years ahead of me that I could devote to it full time.

Nevertheless, I think I can give a kind of vastly oversimplified sketch of what I think happened, based on what one could predict from what this theory says about the nature of God, who created everything, the nature of process, of inanimate bodies, living bodies, human bodies, and society, as well as based on the rather meager empirical evidence we have about how things seem to have progressed from the beginning to the emergence of life, from life to the emergence of human beings, and from human beings through history to the present.

This is not going to be something à la Hegel, however, where everything is logically entailed by what went immediately before, in a dialectic of reason. As I have said several times in this rather inordinate number of pages I have inflicted on the world, there is more to reality and even thinking than reason, with its cause-and-effect necessity.

In fact, though I think that evolution is a kind of dialectic, because all process is dialectical, I believe that Hegel, ironically enough, had things only half right with what you might call the thesis of his dialectic: that the real is rational and the rational is real. In fact, the real is *at least* rational, in that *some* of the things that occur in it are linked by necessity (i.e. causality) to others; but the real is also non-rational (though not *ir*rational) in that many things that happen did not have to happen. And, in fact, Hegel confronts this non-rational aspect of things in what he calls the "bad infinite," which he thinks must be surpassed and suspended in a new stage by reason's turning back in on itself as it tends to lose itself in "...and so on to infinity."

Further, the rational is both real and non-real, as the logic of our dreams and our imaginative activity shows. Hence, Hegel's attempt to show that all of reality can be put into an *a priori* rational dialectic is, if what I have been saying is true, doomed to failure, in spite of its brilliance. Reality is much more messy.

But the reason any process is dialectical is, as I tried to show in Chapter 3 of Section 3 of the second part, that instability implies the future equilibrium, toward which it drives the process. Hence, anything in process contains a specific self-negation (its purpose) within it, which, when achieved, will destroy the process as such—or better, in Hegelian terms, suspend it in the fulfillment which is the existence in equilibrium of the purpose.

But as I said in discussing evolution at the end of Chapter 7 of Section 3 of the second part and in discussing evolution in Chapter 5 of Section 1 of the third part, this dialectic is not one of reason, but of love. God, who is (from our point of view, certainly) absolute love, created the universe out of love, and created an evolving universe. From this we can, as I said, make the following prediction as a kind of hypothesis about evolution:

1: The hypothesis

Hypothesis for the evolution of the universe: The universe as it evolves will be a dialectic gradually revealing more and more God's love for it, and reflecting love within it to a greater and greater degree.

But since love is gratuitous, the dialectic will not involve a necessary progression, as Teilhard de Chardin seemed to think, but will be a sporadic thing.

The gradual revealing of God's love for the universe he creates will reveal itself as a greater and greater respect God shows his creatures, by leaving them more and more on their own as to the specification of what they are doing (though, of course, they can't be on their own as finite existences). The gradual reflection of God's love in the creatures themselves will be shown by activity that more and more makes sense or has its purpose in something other than the agent.

In the beginning, with inanimate evolution, things will be pretty thoroughly directed, since inanimate beings have no control over what they are doing at all, and are at the mercy of their energy level and the energy impinging upon them. This first stage will be characterized by causality, laws, and chance; but we will see that even here, the progress seems to come by manipulating the chance element in the interactions between things.

As to the reflection of love at this stage, all love, which is free giving, is *implicit* or "in itself" here; and what happens has to be construed as "loving" by an outside observer, since there is not what you might call a bias one way or the other in the inanimate bodies themselves. Nevertheless, as we look at what happens, I think it will be able to be said that there is a kind of "giving" that is going on rather than its opposite.

When the higher stage of life is reached, we find God's re-

spect shown by giving the living body acts that are not strictly necessary for its existence; and insofar as the living body has control over itself, it tends to be left to follow its own impulses, rather than being bound by rigid laws.

But even though life is, in Hegelian terms, "for itself," since each living being must work to achieve and maintain its equilibrium in the face of a largely hostile environment, we will find that the living body seems to be "cheated" by its surroundings into doing things that benefit others as it tries to benefit itself; and that progress comes precisely through these acts that the living body does "in spite of itself."

At the stage of sentient life, we find the gift of consciousness, which is not needed at all for the sentient body to behave as it does—and therefore manifests a greater degree of love on God's part; and we find that the sentient body has much more control over itself and its activities than its non-conscious predecessors. But sentient beings also seem to seek out their own kind more obviously and to nurture their young and so on, simultaneously finding their own pleasure in this and doing something which does not really benefit themselves.

But love is "in and for itself" only in mankind, because a human being can know and choose either his own fulfillment or to make as his goal someone else's fulfillment. And as mankind develops, we find the notion of "we" gradually expanding until it embraces the whole of humanity; and creative love expanding until it transforms the whole of the universe that mankind can touch. And of course, in the midst of this, Love Himself becomes a man, and creates a collective person, whose reality expands as more and more people throughout history come to join themselves freely into cells of his mystical body.

But since love is explicit in human reality, there is also a

counter-tendency that becomes explicit, the tendency toward self-ishness and using others for one's own sake; and as human development goes on, this becomes more and more sophisticated, and often clothes itself as love.

The fact that I have used "in itself," "for itself," and "in and for itself" might mislead people into thinking that what follows is going to be triadic, with every "negation of the negation" coming back into a kind of reaffirmation at a more sophisticated level of the first stage which was negated. The dialectic *is* one of self-negation with a definite direction (and purpose) implied; and while it is true that the purpose is contained within the instability, it does not follow that the fulfillment of the purpose allows one to see the previous stage (the one before the process) lurking somehow suspended within it. A self-negation (an instability in the sense a dialectic of love envisions it) opens up unpredictable new possibilities when its purpose is achieved; often there are several avenues that evolution could explore, and sometimes does, going down blind alleys (such as with the dinosaurs) which die out, or arriving at stable stages which simply remain as they are. But for evolution to have occurred down to the present, there obviously is always at least one stage which itself is unstable, and which therefore denies itself in such a way that new possibilities are opened up, at least one of which, when explored, leads to an unstable condition which opens up further possibilities.

One other caveat: It is not a mark of wisdom to consider the path of evolution (i.e. the path from instability to instability) to be the "good" path, and the paths that become extinct as "failures," and the paths that simply remain stable as "arrested development." In the eternal scheme of things, nothing is "better" than anything else; God loves cockroaches as infinitely as he loves us. Granted, we are greater than cockroaches, because we are not only more complex but less limited. But are we thereby *better*? They have, after all,

survived exceedingly well, and even adapted themselves to our mechanized environment. So beware of thinking that "progress" is something that necessarily should be sought after. Progress happens, and where there is instability, process, of course, is inevitable by definition. But not all process is advance toward lesser limitation, and it is equilibrium, after all, which is what is intelligible, not process.

Chapter 2

The beginning

That is the general idea. I want to reiterate, however, that this is going to be the barest of sketches, offered only as a hint that what seems to have happened in evolution and history can without forcing the data be looked at as a development of love in and for the world.

In the beginning, the universe blew up.

That is, at the instant of the beginning, the entire universe was a tiny body, a "black hole,"which was completely unstable at its creation, and could not exist; and so it immediately destroyed itself. The first act of the universe was its total self-destruction.[1]

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[1]Note that this initial instability, which prompted, if you will, the Big Bang, is "a sign of contradiction" to those scientists who insist that the universe is self-sufficient. The only scientific theory which would be consistent with this is the theory of a pulsating universe, in which the Big Bang is the result of the collapse of the preceding stage. The trouble with this theory, however, is that it postulates a mass for the universe much greater than the mass that has been observed. It is not scientific to say, "Well, there doesn't seem to have been a universe that collapsed, and the initial condition of the universe was unstable, and the universe is self-sufficient." This is a contradiction in terms. *If* the universe was initially unstable, it couldn't have got that way by itself from a stable condition (since equilibrium does not spontaneously move to instability, but rather the other way), and *therefore,* something other than the universe created it. Science, as I pointed out in Section 4 of the fourth part, is founded on the premise that it will not accept unresolved contradictions.

Immediately after the beginning, there was light.

The law of conservation of energy was in the universe at the beginning, and so the universe did not go out of existence, but transformed itself into electromagnetic radiation. Not visible light, of course, because the radiation was far more energetic than light in the visible spectrum, but energy of the same form but a much shorter wave length than light. So the self-destruction of the universe was the creation of light.

First Law of Dialectical Evolution: Those stable stages of evolution capable of surviving remain in the universe throughout its evolution.

And so it is with this second stage of the whole universe: the radiation from the initial explosion is still with us as what we call "cosmic radiation," which permeated the universe.

The light, of course, fled the center of the universe; and this meant that the tiny universe expanded. But the mass of the initial body, and the mass-equivalent contained in this light, was so great that the light bent back upon itself in a tight curve, and could not simply run away from itself—which would have stopped evolution at the very beginning.[2]

But as the universe expanded, it became less dense, and so the curvature of space in which it was confined became larger and larger, and is still expanding to this day. We do not know if this curve

[2]This is significant. We will see throughout this sketch that *it is the structure of the universe* which accounts for there being an evolution. If mass were not as Einstein discovered, of a nature to attract even light, then the light at the beginning would simply radiate outward, like the light we are familiar with, and would have no opportunity to interact with itself and produce particles.

will become so great eventually that it will "straighten itself out," so to speak, and the light and everything resulting from it will free itself from itself altogether, leaving each of the results alone, or whether the total mass of the body is such that an ultimate size will be reached, creating an instability whose purpose is a body of the original size, making the whole process start once again[3]—or whether God will intervene, when the final complexity is reached (or wherever he wants, of course), and stop the whole process, imposing an equilibrium on it which will then be our eternal universe in which change no longer takes place.

But to return to the stage we have arrived at, as the light bent back upon itself it interfered with itself. Some of this interference was simply of the sort in which one wave rides upon another, as it were, making the light more intense or less intense depending on the phases of the component waves. No advance occurs in this type of interference.

But there is an interference called "pair production," in which light meets light and tangles itself up within the other beam, in such a way what results are two "particles."[4] This occurred occasionally; and on the assumption that the initial energy of the explosion resulted in energy of all wave lengths, then all sorts of particles, stable and unstable, from the heaviest to the lightest, would have been formed; and since the universe was very small, the light interfered with itself very often, and the universe therefore filled up

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[3]As I say, there isn't any *evidence* that that much mass exists; so it is merely a logical possibility.

[4]Remember, particles are not really little lumps of something; they are only, like everything else involving energy, reconfigurations of energy. See Chapter 3 of Section 2 of the second part.

with particles. Much light remained, of course; but now it was accompanied by the products of its own self-destruction. That is, the light destroyed itself (or "negated itself," if you will) as light, but the result was something new, in which what had been only implicit ("in itself") in the light was now explicit ("in and for itself." The act of this type of self destruction is the light as "lighting itself," so to speak, or light "for itself." How very Hegelian, right at the beginning).

The point is that a particle has greater complexity than the light which made it up. The reconfiguration of the internal structure of electromagnetic energy separated out the electrical and magnetic aspects of the energy into two distinct fields, and created another aspect that was not there before: mass, with its gravitational field and its resistance to a change of motion. Mass is in light only implicitly, potentially; in the particle it becomes explicit. And with fields, space in the true sense emerged.

Already, then, we have instances of self-destruction's resulting in something at least in some sense greater than what it was before. Certainly, a body (a particle) is more complex than the energy out of which it is formed; and as we go along in evolution, we will find a tendency toward greater and greater complexity: what Teilhard de Chardin called "complexification." The tiny body which emerged also showed Teilhard de Chardin's "intensification" in the sense that the light produced this greater complexity by wrapping itself up within itself, so to speak, instead of just spreading itself outward.

But this greater complexity and internalness is at the expense of intensity. Energy is lost in pair production, and drained off as the kinetic energy of motion of the particles that fly away from their corresponding anti-particle.

But since there were many many particles formed, then as

they moved, they collided with one another. When a particle collides with its anti-particle (as it has a natural tendency to do, since the opposite charges attract each other), the two destroy themselves once again into the light from which they emerged, except that the light wave now has less amplitude than the original light that created them, because of the energy lost as kinetic energy.

Here we have progress followed by regress, and the only result is a gradual degeneration of the available energy, according to the Second Law of Thermodynamics. As energy becomes less intense, it can do less, until eventually all becomes merely heat, and we have the "heat death" of the universe, in which there is a uniform temperature of a few degress Kelvin, and nothing else except this heat.

If the structure of the universe were such that all that particles could do in interacting with each other would be to blow themselves up and return to electromagnetic radiation, then evolution would stop right here. So evolution is not simply due to "chance." The structure of the new emergent particles has to be such that they can interact in new ways in order for anything new to happen.

And it is true that in many, many cases, the young universe fluctuated between light and particles. Many particles were also inherently unstable, and "decayed" into other particles and different wave lengths of light.

Protons and electrons are stable particles, however (as are anti-protons and positrons); and when one of these particles came close to another of different mass and charge, then they did not destroy each other and return into light, but produced a hydrogen (or anti-hydrogen) atom or a neutron, with a new configuration of internal space, each of which was electrically neutral, since the electrical field was totally bound up within the atom. And as the

universe expanded, these newer particles, uncharged now and so not attracted electrically to other particles, continued existing as the other particles either vanished back into light or created new hydrogen atoms or free neutrons.

Once again, there was a creative destruction. Electrons and protons destroy themselves as such when they interact; and though the locus of the "remainder" of each, so to speak, is identifiable in the atom (the proton and any neutrons are in the nucleus, and the electrons form a negative shell around it), neither exist *as* protons or electrons any longer. Each gives up some of its identity, and what emerges is a new body, which has its own new properties. Hydrogen is not a mixture of protons and electrons; its essential reality is different: more complex, and more internalized.

We must assume that at some point there was a preponderance of hydrogen over anti-hydrogen, and the anti-hydrogen (the anti-proton positron atom) destroyed itself back into light in meeting its anti-atoms—or that there is an anti-universe that exists either in isolated pockets of our universe or in a universe cut off from the one we know. If equal hydrogen and anti-hydrogen were confined in a small area, then it would all destroy itself again, and there would be no further progress in the universe. So we will assume that something allowed for there being hydrogen in such a way that it remained stable. Once again, the structure of the universe is such that matter and anti-matter did not simply reduce everything once again to electromagnetic radiation.

Can chance account for this? No, as I pointed out in Chapter 3 of Section 4 of the fourth part, chance can *account for* (explain) nothing. Chance is inherently irrational; the "laws of chance" are the laws of what is left over when the remainder is simply random.

So here I find the first hint at the finger of God arranging things so that evolution is possible. As can be seen, the manipulation

is gentle, almost unnoticeable; but it is necessary, or there is only fluctuation, not direction.

But advance even beyond this stage is possible because hydrogen atoms are only electrically stable; chemically, they are not. But they can join with other hydrogen atoms into a hydrogen molecule; and we can assume that this is what happened to most of the hydrogen in the small but ever-expanding universe.

This is the first relatively stable stage of the universe: a universe filled with light and hydrogen gas. Much of our present universe is just this.

Chapter 3

Stars and galaxies

But since molecular hydrogen is stable, what the Second Law of Thermodynamics would predict at this stage is an even distribution of hydrogen molecules through the universe. There was nothing in the initial explosion which would imply eddies in the light that originally fled from the center of the exploding body, and certainly not vast numbers of eddies. True, the universe was small at the time, and so the "fleeing" light was also "returning" light, which was what produced the interference that gave rise to the particles and eventually hydrogen atoms and molecules. This return on itself of the light might account for eddies; but it must be remembered that the universe was expanding very rapidly, as an explosion expands. There was nothing from outside pressing inward; it was simply that the universe was small, and was growing larger.

Be that as it may, one might conclude that evolution should have stopped at this point, with perhaps a few coagulations of hydrogen clouds, rapidly dissipating as the universe grew larger and larger.

But in fact somehow—and once again I detect the intervention of God, directing everything according to its laws, but using chance to bring about the further stage—there were areas in which the hydrogen collected into rather dense clouds, in spite of the extremely weak gravitational field of each molecule.

As it happens, the gravitational field has the property of being "additive": that is, the more mass there is, the stronger the gravitational field of the whole. So as a cloud was formed, it would tend to attract more and more molecules into itself, becoming denser and more compact, with the molecules falling toward the center of mass of the cloud.

And as these molecules moved toward the common center of greatest mass, they followed curved paths, making the whole cloud turn around an axis as it grew denser and denser; the whole moving away from the center of the initial explosion.

And as the cloud moved through space, its increasing gravitational field collected more and more hydrogen into its mass, making it still larger and its field still stronger, and the tendency of all of it to spiral in toward the center even greater, meanwhile sweeping its environs clean of gas.

This gravitational pressure toward the center of mass of the cloud forced the hydrogen molecules at the center to strike each other so hard that they broke the molecular bond and became hydrogen atoms again; and as the pressure increased, the atoms became stripped of their electrons, which escaped toward the outside, leaving the center simply a mass of protons whizzing past (and around) each other, repelled from collision by their like positive charges. But as still more material collected from outside increased the total mass and the pressure toward the center, finally the protons were forced into collision with each other, and they destroyed each other back into electromagnetic radiation.

Once again, the stage for further advance is set by a setback, this time past the previous stages of atoms and particles, all the way back, it would seem, to the beginning.

But the destruction was not complete; it was not like a proton meeting an anti-proton, in which each is totally annihilated

as such and transformed into radiation. In this collision only some of the mass of the proton-proton collision was converted into radiation, because both were particles of the same charge. This was a new, a productive self-destruction, which allowed the "strong force" to create a helium nucleus of two protons, which existed at a considerably lower energy level than that of the protons that made it up. It was the *excess* energy not needed by this new body that was radiated out as light.

And so the center of the hydrogen cloud became a hydrogen bomb, and a star was born.

A cloud mass becomes a star when the radiation pressure from the center more or less balances the gravitational pressure toward the center. This happened not once but billions of times, and the universe became populated with glowing stars, now radiating light in our visible spectrum. And stars, of course, are with us at present, from our sun to all the stars so far away that they appear to us as mere points of light.

A star, however, is not really in equilibrium, because as its central hydrogen explodes into helium, it collapses into a denser mass, forcing the helium nuclei into closer encounters with each other, until—to summarize a very long story—they too fuse into the nuclei of heavier elements, once again radiating out light which slows the further collapse. Depending on the total mass of the cloud from which the star is formed, its internal evolution takes a longer or shorter time, and follows different pathways. Some stars swell to "red giants" and then collapse and explode into ever-expanding gas clouds; others reach a stage of cataclysmic collapse into a neutron star or a "black hole": a body so dense that it becomes a small universe unto itself, because the light around it is so tightly confined that it cannot pass beyond a small distance without curving back onto itself.

The point, of course, is that a star is in process, using up its

fuel until it is all spent, at which point it stops glowing and exists in equilibrium as a kind of cosmic pile of ashes, or until it spews out all of the left-over elements into the surrounding space.

All the while a star evolves, the energy radiated from it is degenerating, according to the Second Law of Thermodynamics, much of it in that very low energy state called heat, from which very little can come. Once energy reaches its lowest condition, of course, it is then in equilibrium, and no more change occurs. Stars glow because they are not in equilibrium, and they are losing energy to reach this lowest state, whatever it is, based on the initial amount of excess energy in the body; and once that is reached, the process stops.

As I say, just as this went on from the beginning of the first star, it is going on now, in all the stars that now exist.[5] Just as the expansion of the universe is sti11 going on, just as cosmic radiation is still with us, just as hydrogen clouds are still forming and becoming stars, so stars are still evolving. Evolution didn't just happen in the past; the "past" evolution is going on as I write this.

What is to be noted here, however, is that it is the forcible destruction of the nuclei of each element that creates by fusion the nuclei of the heavier elements. All elements in the universe were formed by the destructive force in the center of stars; and each gave itself up, as it were, to become a component in the more complex nucleus.

Note further that it was the tiniest element whose minuscule

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[5]Not necessarily all the stars that we can see, because some are so far away that it takes millions of years for their light to reach us so that we can see them; and some, we know from observing novas and supernovas, blow up, which means that some will have already blown up and we will not see the explosion for perhaps hundreds or thousands of years.

gravitational force produced the largest bodies in the universe which are the factories for all of the material complexity of the universe. And this could not have happened without turbulence somehow introduced into the initial explosion.

The turbulences that produced stars, however, also produced systems of stars. Many stars in our galaxy are close enough together that they orbit each other in pairs; and some are in small clusters of several stars. This is not surprising, since the gravitational field of a star is extremely strong, and so it could reach out enormous distances to capture another star.

In fact what happened is that the stars seem to have collected into clusters of millions and millions of stars and gas clouds called galaxies, all orbiting a common center and producing the various spiral shapes that astronomers are familiar with. Recently formed galaxies (speaking in millions of years now) are full of gas and have rather extended arms; older galaxies consist (of course) of older stars and very few if any gas clouds, and seem to have already wound themselves up into an egg shape.

Each of these galaxies or small clusters of galaxies (our own Milky Way, the galaxy made of all the stars we can see as stars plus the cloud of stars we see as the milky way itself, has a companion galaxy visible from the southern hemisphere) are moving apart from each other due to the effect of the initial explosion; moving more and more slowly as the millennia of millennia go on. Once again, we do not know if this will stop and then collapse, or if it will continue indefinitely, or until God arrests it.

Eventually, as I said, barring divine intervention, all the fuel in all the stars in all the galaxies will burn out, and the universe will reach its "heat death," with a more or less even distribution of the radiation lost from the stars, then in such a low-energy state that nothing can be formed from it. And so we can even now point to the

purpose[6] of cosmic evolution: A vast space, whose total temperature is rather evenly just a couple of degrees above absolute zero, possibly including the stable detritus of the magnificent stellar bodies that originally made it up.

[6]I remind you of the sense of "purpose" in this book, which I discussed in Chapter 4 of Section 3 of the second part. It simply means the end of a process, not something "intended" or even "good."

Chapter 4

Planets

If that were all there was to evolution, of course, there would be no one to write the story. Somehow in the course of the evolution of stars and galaxies, something happened to make at least some stars do something strange.

There are two possibilities: Either one star passed close to another, but not close enough to be caught into an orbit, and material from both bodies was pulled out into the space between them, and then fell into orbit around each as they passed away from each other again; or one of a pair of stars orbiting each other was at a different evolutionary stage, and exploded, spreading its cloud of gas around its still existing companion.

In either case, the result was a star with a cloud of gas circling its equator in a kind of ring like the rings around Saturn; and this gas from the other star now was made up of all the elements that had been in the star or stars from which it was formed. We don't know whether our sun is unique in having had something like this happen to it, or whether it is a rare or even fairly common occurrence in the universe, because other stars are so far away that there is no realistic hope of seeing either the gas surrounding them, or the planets (which do not glow, of course, but only reflect light—rather badly, I might add), or even perturbations in the motions of the stars which would indicate the presence of planets. There are now some

hints from things like perturbations that there are in fact planets around at least some stars; but the evidence is exceedingly tenuous.

Since it takes light three and a half years at what Einstein's theory says is the ultimate speed to reach us from the nearest star, travel to even this star would take centuries if not millennia; and so, all the science fiction about interstellar travel is just fantasy, and we will never really know if our planetary system is alone in the whole universe.

Not that it matters. We know that the destruction of at least one star, or the destructive encounter of two stars, at least once was such that total destructiveness did not occur, but the ring of complex gas formed around the star we call the sun.

But since this ring doubtless had a good deal of turbulence in it, and since the cloud of gas in the ring was enormous, then the same thing would happen to it that happened with the hydrogen that originally formed the stars: centers of attraction would occur and the gas would collect and form into a number of bodies.

But these bodies did not have enough material to create fusion in their interiors (Jupiter is at the limit; its interior is very hot, and it is all but a star), and so the coagulated gas formed cool, dark bodies, the planets, orbiting the equator of the sun.

Once again, then, we have productive destruction. But there is more. Since the planetary bodies were cool, the nuclei of these complex atoms could then for the first time acquire their electron shells and become true atoms; conditions in the stars were far too hot for this to happen. And of course, once the true atoms (of all sorts, now, not simply hydrogen) interacted with each other, they combined with each other into that vast array of molecules we see.

This of course occurred in different ways on the different planets, depending on their mass and how close or far away they were from their major heat source, the sun, which—interestingly

enough—disturbed their tendency toward simply drifting toward their ground state by constantly pumping its own radiant energy into them.

If we now turn our attention to the earth, it originally was a planet of a size and proximity to the sun that trapped its original atmosphere of ammonia and methane and didn't let it escape as the atmospheres of moon and Mercury did; but which also was not as hot as Venus, or as cold and small as Mars, allowing storms to turn much of the hydrogen and oxygen into water as well as carbon dioxide and ozone; and—once again compressing a long, long story—we had, at the beginning of earth's evolution, a planet with a crust whose basins were filled with water and whose atmosphere contained simple compounds of hydrogen, carbon, nitrogen, and oxygen.

The carbon atom, like the silicon atom and some others, has the capability of bonding with other atoms in very complex ways; and in the stormy atmosphere of the proto-earth, there must have been many very intricate carbon molecules, the vast majority of which were unstable and ephemeral. Some, of course, would be more stable than others, and so there was a gradual formation of various carbon compounds, including amino acids formed of carbon, hydrogen, nitrogen, and oxygen.

These molecules can link themselves together into still more complex (though less stable) chains; but they also have the characteristic of attracting other atoms to their surface in a temporary way; and it would sometimes happen by merest chance that attracted atoms would be close enough together so that they would bond with each other before they fell off the molecule that attracted them to itself. In this way, some molecules became factories, as it were, for the manufacture of other molecules.

All of this is perfectly random, and the probability of finding

a molecule that will do this is very small. But once it did happen, the molecule would soon become surrounded with the products of its manufacture. This led to a certain systematization of what was happening on the early earth, because many of the parts of unstable molecules that formed and broke up would have been trapped into these stable molecules that kept forming.

It should be observed that this very complex process can only go on under very special conditions: things must not be too hot so as to break up the delicate molecules before they have a chance to interact with others; nor must they be too cold so as to prevent the motion needed to bring atoms and smaller molecules together. As far as we know at the time I write this, this has only happened in our solar system upon earth, which not only is at the right distance from the sun to have the proper heat, but is also covered with churning seas, which mix molecules together.

To take the final step toward the condition for life, it is possible, with an improbability that is astronomical, that a given carbon chain could attract to its surface the atoms that would produce an exact copy of itself, which would then bond together into a twin of the molecule that produced them. Considering all the possible combinations of what can be attracted to a molecule, only one of which will work, this is like asking the proverbial million monkeys to bang away at typewriters and have one of them produce the complete script of *Hamlet*.

But it happened. Such a molecule is now called DNA; and as DNA now exists, at least, it not only can copy itself, but sections of it can produce less complex molecules (some of which in turn produce still others); the molecule is not really a factory for other molecules, but a whole industrial complex. Certainly at the beginning, this was not the case; all there was was a molecule which produced some others by chance, with one of its products being a

copy of itself.

This was not a living molecule, because it was in equilibrium, and anything that happened to it happened because of the forces it contained and its chance encounter with other molecules and atoms. But it was, as it were, all but alive; and what happened on the early earth was that once such a molecule was formed, its twins also by chance occasionally had twins; and once this progression started, the earth was then filled with copies of the original.

But these molecules, while stable, were very delicate, and they could break apart under the strain of external forces, cosmic radiation, or electrical discharges—or they could also attach new pieces to themselves; and some of the resultant mutants also turned out to be self-reproducing. Thus, as time went on, different varieties of self-reproducing molecules spread over the earth.

This, as far as we can tell, is the end of inanimate evolution. In one sense, inanimate evolution goes in the direction of what is larger and larger, to the stars and the galaxies. These are, however, relatively simple systems, when all is said and done. It is only on the cool earth and any planets like it that inanimate bodies can reach the other goal of their process, which has nothing to do with size, but is the ultimate in the complexity possible without the added assistance of the super-high equilibrium energy of life.

All during this process, which is still going on (except on earth, whose direction has changed because of life), what is less likely to happen has happened; the Second Law of Thermodynamics would have predicted the exact reverse of what I have described, even though, as statistical, it would admit of the possibility of evolution as we know it. But the advances to further stages have never involved a violation of the bodies' natures and the laws of their interaction; it has always been a manipulation of chance by which something possible but extremely unlikely by the laws of interaction occurred;

and this occurrence led to another even more unlikely possibility's being realized, and so on down the line.

So there is no cosmic watchmaker at work here; if he simply started things and left them to themselves, the Second Law of Thermodynamics would have taken over, and we would have had nothing but hydrogen spread evenly through a cooling void. You might think that the cosmic watchmaker had only to make the exceedingly complex structure of the universe's material, and that would be enough. By "the structure of the universe's material" I mean the potential of electromagnetic radiation to form itself into particles, which in turn have the potential to form themselves into atoms, which now have the potential to form themselves into molecules, which now have a gravitational attraction to form themselves into stars and then into different kinds of atomic nuclei, which, once a star is destroyed into smaller bodies, have the potential to form themselves into atoms again and into molecules. All this potential had to have been present in the initial structure of the electromagnetic radiation, or none of it could have happened.

But the evolution would not have occurred if these initial conditions were simply given. As the Second Law of Thermodynamics indicates, the tendency of the universe would be toward breaking up and simplification, not greater and greater complexity. Something had to be directing thing so that the potential could be realized; because the likelihood of its being realized was so small as to be practically nonexistent. So there had to have been a director as well as a beginner of the process of evolution. And, of course, given that evolution takes place by means of finite activity, then the one who is responsible for finite existence had to have been creating each stage and each advance. The point is that based on what we have seen so far, he does so, not by wrenching it into a new shape, but by letting it, so to speak, do it by itself, as

when a father shows his four-year-old how to fish.

As to what the bodies were doing and are still doing to each other, it seems that at every stage, each body gives up its own identity and merges with the other to form a more complex whole, which is in equilibrium at a lower energy level, and therefore which gives up the excess energy it no longer needs, and while it is doing so traps the components within it and transforms them into itself. Now these components did this to themselves in no explicit sense unselfishly; they were simply doing what was necessary because of their structure and the forces acting on them. But still what they did do was give up their being as what they were to become parts of what was greater than themselves. And this is what one would expect of implicit love. So the hypothesis looks to be verified so far.

4: Planets

Section 2
Animate Evolution

Chapter 1

The impossible leap

At this point in evolution, it was not the unlikely, but the impossible which occurred. An inanimate body has only its ground-state equilibrium, and therefore it tends toward and is stable only at its lowest energy level; it is impossible for it to be the cause of a chemical which is stable at a state higher than its ground-state equilibrium, especially since that chemical also has the ground-state equilibrium which it tends toward, and it must actively fight this tendency within itself to maintain this super-high energy. The way a living body is organized, as we saw, is inexplicable in terms of the materials which organize it, because its soul (its unifying energy) is, even in the lowest form of life, free from domination by its own quantity.

I say the leap is impossible; but of course, since it happened, it is possible, and therefore is by definition and effect; and in this case, since the effect is that existence is limited less than can be expected, the cause has to be the cause of finite existence itself or God. No finite existence can account for the emergence of a living being; certainly no material finite existence, even a living one, can, because it can only produce something outside itself by manipulating energy. But energy is not capable of surpassing quantitative limitation. The surpassing must be given to it from something in control of limited existence.

What I am saying is that miracles happen all the time, in the course of nature; divine intervention lifts the finite beings beyond their own unaided capabilities. Any parent knows this in his heart of

hearts. He looks at his offspring and says, "How could *I* have done such an awesome thing?" It is only by being saturated with materialist mentality that a person can speak of "making babies." What happens is that one provides the material conditions for the intervention of God Almighty; it is only because it is common that it seems self-explanatory.

In any case, at the emergence of life, God miraculously brought the first living being into existence once the inanimate world on earth had evolved to the complexity by which one complex molecular system could support such a form of organization. And, as I said, God continues this feat with the conception of every single living body. It would be well to pause in wonder here. Life is literally a miracle; it is natural, but its nature is lifted beyond the mere material.

Hence, the very first act that made life emerge was a lifting of a material body beyond itself to an essentially higher kind of existence which it could not attain as material; and so life shows the love of God for his material beings. But notice that God did not simply impose life upon the material world; the world waited until what could support life emerged by manipulated chance into it, and then this was lifted up to heights that it could maintain, but which it could not reach by its own efforts. This shows God's infinite respect for his creatures.

Chapter 2

The living body

But the living being which now existed was in itself the exact opposite of love. Since it lost energy with every act it performed, because of its internal tendency as material to return to its ground state (which would kill it), it now needed to replace this energy from the environment, to replace worn-out parts, and to fend off energy which would tend to destroy it. Hence, far from being something which gives itself up to any energy impinging on it from its surroundings, it closes itself off from energy not useful to its development and maintenance, and at the same time seeks out and absorbs energy that it needs, destroying other molecules and even other living bodies in the process.[7]

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[7]There is a question that arises here. As we saw in discussing fallenness in Chapter 5 of Section 4 of the third part, the condition of mankind finds its most rational explanation in something akin to what Genesis relates about the first man. But, as I have pointed out elsewhere, God is eternal, and so time is meaningless to him. My hypothesis here is that God made the actual evolution of the universe (at least the part in which man is involved) contingent upon the decision of the first man; and the destruction of living bodies by other living bodies is a result of this fall, not something that would have occurred had the first man not rejected God. Carnivorous animals *can* thrive without eating meat; and so it is conceivable that, had the first man not sinned, they would not in fact have eaten meat.

My hypothesis states further that one of the functions of the New Adam, Jesus, was to restore the natural world to its original state if he were accepted by the Jewish

The living body, then is essentially selfish, or for itself at the expense of its environment. It will use anything in the environment which can serve in some way to maintain it, and it will defend itself against anything which can in any way destroy it. It seems that life, this higher stage created miraculously by the love of God for his universe, does not reflect its creator at all, and acts in direct contradiction to the way its creator acts.

But as it happens, the very tendency of a living body to maintain itself at the expense of its environment is used, insofar as the environment itself consists of living bodies, to effect the cooperation of all the living bodies. The tree produces a nut, which is harvested and buried by the squirrel, which is not planting trees but merely seeking to have nuts available during the winter; but it does not use all the nuts it planted, and so the tree proliferates through the predation on it by the squirrel. The excrement of the squirrel also serves to replenish the chemicals in the ground which the tree needs to absorb. And so on. Any book on ecology can show how marvelously the living bodies in a given area use their users in just such a way that by chance all benefit and can maintain not only individual but population equilibrium.

And this is what I was referring to when I said that God "cheats" the natural tendency of the living being. It is still for itself at the expense of the environment; but living beings have filled the environment (by chance) in such a way that all prosper. This

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people. I think Isaiah's prophesy of the lion lying down with the lamb and so on would literally have come to pass. But the Jewish people and their Gentile overlords—the whole world, in other words—rejected Jesus, and so the world continues with suffering and evil in it until the Second Coming, when every tear will be wiped away, and there will be a new heaven and a new earth.

But this is really Theology, and so I leave it for this brief footnote as a mere speculative philosophical hypothesis.

cooperative selfishness is itself all but a contradiction; and it is so incredibly unlikely in itself that it forces itself on the attention of those who observe it, and even those whose minds are unwilling to admit a creator rhapsodize about how wonderfully chance (disorder) and the laws of probability order things when there are enough chances available—not noticing that the tendency of the laws of probability is away from systematic interaction rather than toward it.

There is also another aspect of the living body which is not perfect selfishness. Since it maintains a super-high, but definite, energy level (its biological equilibrium), it frequently absorbs more energy than will put it in exactly this condition, and so it must get rid of this excess by doing something that is not necessary for its existence. Living bodies, then, exhibit activities which are not strictly necessary for their existence, and which further are not the result of being acted on (at the moment) by outside energy. They *play,* or do gratuitous things. Since at any moment they can take in energy to replace the energy they are losing, they can afford to be prodigal with their activity, and so many of their acts make more sense in terms of *joie de vivre* than in terms of self-maintenance in the face of a hostile environment.

So in spite of the fact that any ecology is a jungle, with everything preying on everything else, it is also a monastery, with everything giving to everything else, and a playground, with everything disporting itself in the abundance of its existence. The birds' songs by which they threaten others soothe our ears and are sung even when there are no others to threaten—or even ears to soothe.

Reproduction is an interesting aspect of living bodies. The simplest reproduce merely by dividing, doing not much more than imitating the self-reproducing inanimate molecules from which they emerged. But very soon, in order to reproduce, the organism must

meet with a different member of its own kind, so that the union of the two can produce another of the same form with different individual genes, thus at once preserving and modifying the form of life.

The modifications allow the individual living bodies to fit into different ecologies, and at the same time reproduction serves to preserve the form of life even though the material nature of the body prevents, in our changing world, eternal existence; its tendency toward ground-state equilibrium eventually wins over the soul's attempts to fight it, and the organism dies. But it has before this reproduced other individuals of its own kind, and so the soul exists still, though limited to different degrees. In this sense, reproduction is for itself, though not for the individual; it is for the form of organization, which is to some extent free of its embodiment.

But as far as the individual is concerned, this for-itselfness has nothing to do with it. The individual living body does not benefit in the least by the creation of another body which has the same type of unification; it even loses energy and parts of itself as it does this, though of course by nutrition it quickly replenishes from the environment what it has lost. Hence, the very act that preserves life beyond the individual body turns out to be an act most like the creative act of God: not a giving up of oneself for the sake of another, not a sacrifice, but a purely gratuitous act which is neither of benefit nor loss for the agent. In preserving the species, the living individual performs an act of love, a clear reflection of the love of its creator for his universe.

And in performing this act, it goes outside itself to another of its own kind, simultaneously establishing solidarity with its own kind and affirming that the act is for itself in preserving the form of life and going beyond itself into another or allowing and even enticing another to invade itself so that something can emerge other than itself. I said in analyzing this characteristic of life in Chapter 6

of Section 1 of the third part that it was very mysterious. It becomes, I think, less mysterious when one puts it in the context of the dialectic of love. Since the living being is in itself the opposite of love, it would not be surprising, if my thesis is true, to find that God has turned the tables on it and made one of its most significant self-preserving acts an act of love.

As to the evolution of living bodies, the differentiation of individuals that occurs in reproduction does not result in the emergence of new kinds of living bodies, but the preservation of the species; the variation is only within the limits of the species, and never passes beyond it. It is only when the genetic molecules are *destroyed* by chance events such as heat or cosmic radiation that monster births occur; and the overwhelming majority of these are such that they either cannot live at all, or cannot live to maturity, or cannot reproduce if they do.

But once again, the event which is possible but incredibly improbable occurs, and the destructive interference with the genes by the environment produces an organism which is better adapted to the ecology and which can reproduce with some living being in its vicinity, resulting in offspring different from the grandparents. Eventually either through further mutations or the variations in genes from the parents, the offspring several generations later can no longer reproduce with those from which their ancestors sprang, and a new species is formed.

Wallace and Darwin thought that this occurred through tiny changes (indeed, how could reproduction take place if the change was drastic and produced only one organism, as it would?); but there is not only no evidence of this, it is also impossible, since many adaptations, such as the eye, are so complex that the intermediate organisms would be maladapted for thousands if not millions of generations.

2: The living body

There is really no satisfactory mechanism to account for how it is possible for one species to evolve from another, a fact which has led to the "creationist/evolutionist" controversy, with each side totally and dogmatically repudiating the other. But since the conception of every living body even from its natural parents is a miracle that needs God's direct intervention, because it is the lifting of the material beyond its own materiality, is it too much to expect God to use mutations to produce a body capable of supporting a different soul? He seems to be at the same time manipulating chance so that this occurs and living beings in one sense evolve out of each other, but in another sense are merely the conditions under which God populates the planet with the vast variety of species which we see, and the still vaster variety of species which no human being will ever see, as every explorer to a rain forest will testify.

Thus, the species which emerge do so under the conditions of the environment; they emerge by modifications of their parents, and in reference to the ecology to which they are adapted or not; and God does not prevent the numerous mutations which result in monsters that cannot survive. Once again God is respecting the reality of his creatures and not simply foisting diversity and greater freedom from limitation upon them, but lifting them beyond their own capacity and opening up possibilities that they *can* take, but which they have no particular innate drive to take.

I said in the early discussion of evolution in this book, in Chapter 5 of Section 1 of the third part, that the natural tendency of living bodies was conservative and against evolution; evolution occurs, not because of a Bergsonian *élan vital,* but because of destructive interference with the species as it exists, and goes directly counter to its tendency to maintain itself and adapt to differences in the environment with as little change as possible. So even here in living bodies, we find constructive destruction. Advance, not

surprisingly, occurs in spite of the living body, not through it, because it is for itself, not for future beings; and so God once again cheats, using now the destructive tendencies of nature to bring about greater complexity and lesser limitation.

2: The living body

Chapter 3

Animal life

If we turn our attention now to the next higher stage of being, that of animal life, we find that it is characterized by sense consciousness, which in itself is a spiritual act with no quantity, but which reduplicates itself (while remaining one act) as a form of energy, as we saw in Chapter 4 of Section 2 of the third part.

By consciousness, the living body becomes present to itself, though in sense consciousness, this presence is merely a presence. Animals are aware of themselves, but not aware of what they are; they are simply "with" themselves insofar as the consciousness of the moment contains itself as part of itself. Thus, consciousness allows the body to be for itself in a new way.

I mentioned in Chapter 4 of Section 2 of the third part that consciousness in animals at least is a complete superfluity, since as subliminal perceptions show, the behavior is the same whether or not there is the spiritual act which makes it self-present. Here again, then, we have an indication of the "giftedness" of God's creation and the prodigal love of the creator.

Animals are also, by their ability to move, freed from the action-reaction prison of the inanimate world and also from the strictures of being fixed to one spot of the plant world. Unlike plants, which are either tossed here and there by the forces of the sea or air or rooted in one place, and must therefore take the nourishment

than chance puts in their way (only growing toward the light, for instance, but unable to move into it), and must build shells and thorns against predators, animals can seek out their food and run away from danger.

But the senses that enable them to do this and their greater access to nourishment and ability to escape from danger allow them greater scope for play also; and we find them exercising for no other purpose than exercising, and looking, as Aristotle says in the first book of the *Metaphysics,* for the sake of looking. The act itself that the animal performs becomes much more an end in itself than what the plant does; and so it is not obvious whether the act is for the sake of survival and self-maintenance, or the self-maintenance is for the sake of performing the acts. In this too, for-itselfness has reached a new level. Not all is for the whole, though all is by the whole; some of the acts simply *are.*

Further, the consciousness of the animal makes its environment present to it; in consciousness, even at the sense level, what is not the animal is within its consciousness as not within it; and so what is apart from the animal is taken into it, but left apart from it as it is taken in. In nutrition, the world outside is taken into the living body and destroyed and made over into the living body (as Hegel said); but in consciousness, the world outside is taken in and remains still outside, totally unaffected by this assimilation.

Hence, the animal possesses what is not itself with a completely non-destructive possession. In fact, the possession of what is not itself was even called by Aristotle and St. Thomas a "becoming" of the object, insofar as consciousness in effecting the possession actually makes itself over into a form which has no other function than to stand for the object and render it present. It is by transforming itself, then, without actually changing itself as a body, that the animal gains nondestructive possession of what is not itself.

Now this being present to itself and having the world present to it is not really Heidegger's *Dasein*, which occurs at the human stage and involves recognizing the self and the world and the presence for what it is; but still it is *Dasein* in potency, so to speak. But the interesting thing about this possession or for-itselfness in the animal is that it has no purpose, as it does in human beings, who can act on this explicit recognition. In the animal, the consciousness is, as I said, superfluous as far as behavior is concerned; if it were a reactive machine like a computer, the animal would function just as well. And so consciousness in the animal is for-itselfness purely for itself; it simply is.

The moment of consciousness is all there is in the animal's presence to itself; its past is present to it in this presence, but only as a presence, not as an explicit recognition of it as past; the world is present to it not as a world but simply as a presence, not as something explicitly distinct from the act of consciousness. It is a pure gift, fraught with implications that the animal cannot develop or make use of; and so for the animal it is simply glorious superfluity.

Thus, the animal is in loving contact with the world in a way that lower forms of life cannot be; its act of consciousness, superfluous to itself, puts it into non-destructive communication with its environment; and so this stage also seems to be an advance in unselfishness.

It would also not be surprising to find that animal reproduction would be a transformation in this direction over the reproductive activity of lower forms of life. In plants, reproduction occurs and the new organism is formed; but the plant does nothing for the offspring. Once it has formed the seed and given it the conditions by which it can separate from the parent plant, it has nothing whatever to do with it.

But animal reproduction is different from the beginning.

First of all, the animal is driven by its sexual instinct to seek another of the opposite sex; and to seek the other when the other is receptive, otherwise to leave it alone. The roles of the sexes are very instructive here too. The male is generally the aggressive party, actively going after the female, which waits for it or even flees. But the female is the one which keeps the control over the act, warding off the male until she is ready, and accepting him only on her own terms—and this sometimes means the death of the male, as in bees and certain other insects. So the aggressive one, in good dialectical fashion, is the one which is controlled, and the passive one is the one which controls. (This, incidentally, is one of the reasons why I think feminism is a perversion; it has taken the superficial view and given up its control in the name of imitating the aggressiveness; but in so doing it has, as I said, freed the men from female control.)

And it is the female, the ostensibly weak and submissive partner, which receives the sperm and fertilizes the ovum within itself. As soon as the young can survive outside the mother, they are then expelled, and either fend for themselves against now predatory parents, or are nurtured until they can survive on their own.

The ambiguity in what is for itself performing an act that benefits the offspring and not itself is shown in this predation upon one's own offspring. It reveals the fallacy in Hegel's "cunning of the concept" by which the form of life escapes from the doomed body and preserves itself. This does occur; but if that were the logical purpose of reproduction, then the animal would never have an instinct that made it feed on its own offspring.

An interesting new aspect of sexual behavior is that sex involves the submission of the animal to the partner. This occurs on both sides; the male submits first to having the female dally with it; and then the female submits to the male; and then both, very often, submit to the offspring until they are able to live on their own. This

submission to the young is very instructive, especially given the attitude of the parents to their adult offspring (which at the least they then generally regard as rivals), because it is an activity which is clearly not to the parents' advantage, and benefits something other than themselves.

There are two senses, however, in which this nurturing of the young is for itself: First, in the sense that it is for that abstraction, the form of life, so that it maintains itself in spite of the demise of its concretion in this generation. But, as I said, this form of life is not a reality, even though as embodied it controls the living body; so there is no "it" to continue existing "in" different bodies. Still, that element is there in sexuality.

The other sense in which nurturing is for itself is that in each of the animals, the conscious aspect of the sex drive (the emotion) is gratified. Again, if we take things too superficially, or in this case too anthropomorphically, we would be inclined to think that the sex act is for the emotion, which is for itself. But that, as I said in discussing instinct in Chapter 5 of Section 2 of the third part, is not really the case; the emotion is simply a gratuitous epiphenomenon of the drive itself, not a motivating force behind it. It is the drive which drives, not its conscious aspect. Hence, sexual gratification in the animal is simply the presence of the operation of the sex drive; and in that sense it is for itself just as any sensitive consciousness is; the animal has sex *and* feels pleasure, it does not have sex because of the pleasure.

So the sex act, and even its pleasure, is a superfluity for the animal, involving an act which is not really for itself (because it is "for" the offspring), but which in a kind of sense is also for itself (because in fact it gratifies the emotion). It is exactly the kind of thing you would expect if the meaning of things is love, and this particular stage of development is necessarily for itself against others. It

is fitting for God to cheat it into being for others, but in such a way that while it is acting for others, this also has a for-itselfness about it. The hypothesis seems to be more strongly verified the farther we go in evolution.

As far as the adaptation of the animal to its environment is concerned, the genetic adaptation continues just as it does with lower forms of life. This is, as I said, due to destructive interference with the genes, leading to monster births. Some of these better adapted offspring lead to new species; but it should be pointed out that many of these new species survive only a limited number of generations, and then become extinct, as conditions change again. Hence, there is evidence that God, who seems to be directing this aspect of evolution, is working hand in glove with the laws of the environment and not simply putting the "best" organisms on the earth. The advance to higher levels of being occurs, but not in any kind of regular or logical progression; evolution is full of blind alleys and false pathways. Hence, once again we find the respect that God has for his creation increasing as the creatures themselves advance and gain more control over themselves.

But of course the individual animal is much more capable of adapting itself to its environment than the plant, because if the environment is hostile, it can move to a different place. And this greater control by the animal also leaves its actions freer from genetic necessities than the plant; it is much more obvious that animals play than that plants do. Much of animal behavior is not really purposive at all.

But things become really complex when we move on to the next stage of evolution: the human stage, which is both in itself and for itself, because humans explicitly understand and choose their own destiny.

3: Animal life

Section 3
Human Evolution

Chapter 1

The human being in himself

The purpose of this section is to consider the human being in the abstract as a new stage in evolution, and also, having established that he interacts with other human beings in forming families, tribes, and then nations, to take him up to the beginning of civilization. Then in subsequent sections we will take a flying look at ancient, medieval, and modern civilization, to see if we can thread our way through that labyrinth with our hypothesis.

Once the human being appears on the scene of evolution, intellectual consciousness and freedom of choice appear. He now not only is present to himself, but knows himself (to some extent) for what he is; and knows his world as what it is, and explicitly that it is different from himself; and he consciously directs himself toward goals that he freely chooses. Not only that, but he acts on his environment, and instead of adapting himself to it, he adapts it to himself; and so the direction the world's process takes, insofar as human beings act on it, is now quite different from the direction it would have had if he had not been there. And this influence becomes greater as human beings learn more and more, until today we discover that many things we are doing affect the whole planet rather drastically.

Since intellectual consciousness is that of grasping relationships, each human being's development actually starts in the same way as everyone else's. Each of us begins being conscious with what, in Chapter 2 of Section 1 of the fourth part, I called the mystical experience of empty consciousness—no matter what the sensation or

the first form of consciousness is. We cannot, of course, recognize it as such, because we have nothing to compare it with. In this sense, the first moment of each person's consciousness is the same as what Hegel called "being," which as far as content goes, is the same as nothing, since there is no explicit content at all; it is implicitly everything and explicitly nothing. Hence, it is completely "in itself," as he would say, with the self as *aware,* but not explicitly aware *of* anything (even though in fact it is a limited form of consciousness), not even explicitly of its own awareness. It is the kind of consciousness described by cartoonists as an exclamation point inside a balloon.

The second moment of consciousness is the first concept, which necessarily is that of difference (and the different as such), because until we recognize a novelty in our consciousness, it remains that first undifferentiated moment. That is, the fetus might have a sensation, first, of a pain in the leg and then of a movement of his arm; but until he becomes aware that the "new" sensation is *not* the old one, then *for him* it *is* the same: that experience of abstract being, with no subject and no object.

Once difference is recognized, of course, then the person begins searching for differences, and simply multiplying cases of "different," without recognizing *how* they are different. He gets into a Hegelian "bad infinite," in which the same thing just goes on and on. In order to move forward and be aware of what the difference *is,* it is necessary to be aware of different aspects of each sensation; and at this stage, the person only knows each moment of consciousness as a unit, with each somehow different from each other one.

The third moment is also necessary: a kind of Hegelian synthesis of the first two, in that we keep finding new cases of "different" until we recognize something that is not different, and have Hegel's "negation of the negation, and arrive at the concept of

sameness.

This leads to being able to notice that the new moment of consciousness is new (and therefore different) and not new (and therefore the same), which directs attention to what is the same about it and what is different, and so differentiation *within* the moment of consciousness becomes possible, with partial similarity.

At this point, the paths of the development of human consciousness diverge, because they depend on the concrete contents of the moments of consciousness. Still, there are stages that everyone must go through, though not necessarily in the order I will give them.

Once we split consciousness into various aspects, some of which are the same and some of which are different, this in turn lets us notice constancy, in which one "patch" of sensations remains the same while the background changes, and so we have a series of "objects" in the Kantian sense (that is, constant *parts* of the sensory field), which we then begin exploring and trying to categorize. There is, of course, as yet no distinction between the real and the imaginary, and no real notion of a self.

But while we are doing exploring, we are also acting; and as we do so, we notice that some objects in the visual field are intimately connected with both activity and passivity: those objects we later will call "hands" and "feet" and so on. As we grasp our hand, one hand feels the grasping, the other feels being grasped, and the eyes see the action. Here we arrive at the concept of causality, as well as that of being acted on. And eventually it dawns on us that these objects are also the subject, and that we are an "object" in the same sense that mama and the doll are. We have learned that we are what we will later call a body.

But then, in our exploration, we discover that we are not like the doll, but more like the dog and mama, because we move

independently of being moved; and gradually we find out that we are much more like mama and daddy and brother than the dog and the cat, and we learn that we are human beings.

While we are engaged in this process, we are also interacting in many ways with mama and daddy. They provoke various responses in us, and we discover that we provoke responses in them. At this stage, we still refer to ourselves in the third person, but after a while, it occurs to us that mamma and daddy are centers of their own universes, just as we are a center of our own universe; and we discover ourselves as a self.

Not too long after this, we learn to make the distinction between those apparent objects that occur in sleep and in just sitting and thinking and the objects out there in front of us; and we learn about real being as opposed to mere imagining.

But since we are not yet really human, really adult, we begin to imagine ourselves as one and play at doing what adults do; and as we do so, we are also developing our skills, so that increasingly we are able to do what adults can do. In not very many years, we have all the basic skills, and adolescence comes, in which we recognize that the adult we will be depends not on something automatic, but upon what we decide for ourselves to be; and at that point, the human being is in and for himself; and progress from then on is a question of abilities and choices.

The pure gift of for-itselfness that we found in the consciousness of the animal now has a purpose in this embodied spirit, in several senses. First of all, the grasp of relationships among sensations allows consciousness to be aware of the self as the subject of many conscious acts; and the knowledge of the sensations in acting upon one's own body allows each of us to be aware that he is a body with a mind. Finally, a grasp of imagination and what it can do allows us to formulate ideal selves and to set up instabilities in ourselves that

we then act to achieve; and therefore, this act of imagining, which seems so useless, is actually the vehicle for the self's control over its whole self. The freedom from the materiality of the self allows the soul to direct the material self, and through it to have power over much of the material world.

Secondly, the grasp of relationships now brings the otherness of the other as such into the self; we now know that objects are not ourselves but that they are as real as we are. We also can recognize the selfhood of other selves, in that they behave in much the same way as we do under the same conditions; and this grasp of relationships connected with sensations is what allows us to use or create sensations that stand for acts of consciousness, and to use these sensations to communicate with other selves by means of abstract language.

And because we can recognize the selfhood of other selves, we can put ourselves in another's place, and make the other's goal in her life part of our goal for our life; and thus love in the true sense is now within the power of the evolving universe.

Let us then consider this in the light of the hypothesis. First of all, it is clear that the gift of this level of consciousness, that of spirit, is a raising by God of a material creature totally beyond materiality, while leaving him still limited materiality. He is material, but materiality has little power over him, and he has great power over matter.

Secondly, as we will see in what follows, God frees human beings from domination by their matter, and respects their freedom, so that they can abuse it if they choose. God now gives advice, though nature and even directly, and provides opportunities, but no longer manipulates chance or cheats, except on very rare occasions; human beings are left to the consequences of their acts, even the eternal consequences.

1: The human being in himself

Thirdly, this power that human beings have to change the material universe to suit their own ideas of what it shall be also frees the material universe from God's manipulation of it; it now takes its direction, not from above, but from within itself. Hence, in the human being, the universe becomes free, in a sense, because it is, as it were, self-directed by a part of itself (just as each individual is self-directed by his mind; collectively we are the mind of the world). God leaves the ultimate state of the developing universe now up to the universe itself. God does not give human beings "foremanship" over his material universe, telling them what to do with it and seeing that they carry forth his plans; he gives them dominion over it, so that they can do with it what they chose. Considering what human beings have done with what he gave them, it would be hard to see how God could have shown more respect for his creatures.

Chapter 2

The human being for himself

With the emergence of intellectual consciousness, there comes the possibility of truth—and error—of goodness—and evil—of beauty—and ugliness. None of these existed before human beings existed, because they all involve conceptual thinking and God, who thinks, does not think in concepts.

If we look at the original human being, as I described him in Chapter 5 of Section 4 of the third part, we find, as I said, the embodied spirit who was to decide the basic genetics of the human body. God, who had been playing with the genes of his creatures, as it were, gave the game over in this one case to his new creature who could think for himself. He was to use his imagination and choose the kind of mammal he was to be.

But, as I said there, he somehow used his imagination to create for himself an image of what in some way was outside the range of his material possibilities; and he chose not to submit to the limitations God had imposed on him—because God imposed on him the restrictions implicit in what his ancestors and the possible modifications of their genes would allow. God, following his respect for all his creatures, would not simply fashion for the human being a totally new body to his liking (because after all, this large-brained descendant of the apes couldn't make the choice without already being a body).

At this point I have a query. Is it possible that Adam was the first human being in our sense of the term, and the ancestor of all of us, but that Adam had a number of ancestors that were also embodied spirits, developing their self-consciousness to the point where they could make a rational choice about their bodies? That is, it is possible that Neanderthal Man was the common ancestor of human beings, and our homo sapiens, apparently so different from Neanderthal Man, was the result of Adam's being a Neanderthal who was given the power to alter his genes? After this choice, the Neanderthal race would then gradually become extinct, and the human race as we know it take over. I am not offering this as something that could be established, but as a possibility that might be worth thinking about.

If something like this is the case, of course, it would follow that Eve would have had to be brought out of Adam, because the new genetic structure would have to have the ability to be transmitted sexually. I do not necessarily want to say that the Bible was reporting things literally (among other things, that Adam was directly fashioned out of the slime of the earth, or Eve from a rib); but it might very well be that the knowledge of the real event of original sin was necessary for human beings, and so the legend was more accurate than we might think, just as the psalm of David about having his hands and feet pierced and so on was more literally accurate as prophesy than even he himself could have imagined.[8]

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[8]One can read Genesis, by the way, as implying that the original intent was to have Adam the sole embodied spirit, the ruler of all the rest of material creation; but that Adam himself, seeing the other animals in pairs, felt lonely and in need of a companion, and so God created Eve for this purpose, and humans then could reproduce sexually. On another note, consistently with what I said previously, it is interesting that originally in Genesis God did not give animals to man or to other animals for food; the original food was seed-bearing plants. Presumably, it was due to

But it must have happened that Adam sinned, and that this infected all human beings with the anomalies of death and lack of control over the emotions by the spirit. He wished "to be like gods, knowing good and evil," not realizing that God knows no evil; and by so doing, he brought evil into the universe (though it presumably was there in the spiritual realm eternally, because of analogous sins of angels).

In any case, human development started from this initial disaster. On the one hand, there is a development in a positive direction; but because of the crippling of our nature, this is a struggle, involving pain and suffering and a tendency toward evil which presents itself as good; and there is no guarantee of success. And on the other hand, there is the will to power and the illusion that the human being can be whatever he wants to be, and that he is the only one in control of his life: the refusal to submit; and this impotent kicking against the bars of the cage of reality dresses itself up as nobility and virtue, scorning the poor fool who yields to what cannot be avoided.

But, since this self-corruption of human nature not only affected Adam who sinned, but all of his progeny, who carried with them the weakness of body and mind attendant upon the genes we inherited, God "cheated" once again, and offered the promise of redemption, and a restoration to a position similar to what the human being could have been in had he not chosen to fulfill himself by destroying himself. But in order to take advantage of the

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the fall that animals ate each other; and Hebrew tradition, if I am not mistaken, reflects this in justifying animal sacrifice on the grounds that it is a recognition that the animals belong to God, really, and God is letting us use them as we do; and we should not kill them lightly. This would fit with the notion that if the universe had been restored by the acceptance of Jesus as king, no one would be carnivorous.

2: The human being for himself

restoration, a long, long development was necessary.

The first step the human being takes leading himself outside himself is that of seeking a mate for himself, and having offspring. Here, as in other animals, human relates himself to human; and so humanity also is for itself while being for the other.

But human sexuality is different. A human being can have sex either for the sake of the partner, or for the sake of offspring, or simply to gratify his own feelings; and so sex, which in itself is neutral and only abstractly for another, becomes explicitly (in the first two cases) for the other and an act of love, or explicitly for the self and an act of selfishness, depending on the choice of each partner. If each is willing to recognize the selfhood of the other, the act is an act of love and an act of self-fulfillment. Here, the self becomes a person: a self related to the other self, with the goal of his life involving the other's goal for her life, producing an eternal togetherness of the persons.

But if one partner uses the other purely and simply for his own gratification against the other's wishes, the act is evil, and an act of hate. The act not only isolates the self from the other person, but violates the self that it is trying to fulfill. If one's submission to the other is so complete as to be willing to be violated for the other's satisfaction, the act is an act of self-hatred and is also evil. One not only violates one's own self, but cooperates with the other's violation of his own reality; and so the act cannot even be called an act of love.

There is a sophisticated variation on this: the second case above. If a person has sex with another *simply* for the sake of having a child, this is also, of course, rape and a violation of the personhood of the partner; but it *looks like* an altruistic act, because it is ostensibly for the child. But in these case, the person does not want the child for the child's own sake, but for the adult's gratification at having an extension of himself. The reason for this is that love is the acceptance

of another, not really the desire for another; desire in this sense involves using the other for one's own gratification.

And as evolution goes on, there is the difficult path of true sexuality, which involves pleasure and joy, but through submission and even sacrifice. But this is increasingly denounced from two directions: from those who claim that "natural" sex is its biological dimension, not realizing that succumbing to emotion puts human beings below animals, because instinct does not function in humans as it does in animals, but seeks its own gratification at the expense of both the individual and the species. Secondly, it is denounced from the side of the sentimentalists, who would have sexuality involve total giving, total submission, total openness and the disappearance of the two in some third unit which is supposedly greater than both.

This sane path denounced from both extremes also operates with all the other emotions, since every emotion can go to opposite extremes. Hence, concern for others will have to contend against hard-heartedness and compassionate altruism, both of which masquerade as "true concern for others," and each of which is gratification of one's own feelings, not a rational assessment of the true situation. Bravery will be scorned as cowardice by the rash and as rashness by the cowardly. Gluttons will look down on the temperate as "worshipers of the body," while the worshipers of the body will consider the temperate gluttons; and so on. Each aberration prides itself on its virtue, and poor virtue creeps about in guilt. But nowhere is the sophistry more evident than with sex.

In human sexuality, the union of the two partners reaches its fruition in the child, who of course combines the genes of both and has traits of both, and so is the interaction embodied. The child is also completely selfish: is selfishness in and for itself, and must be taught that he is not the center of the universe. But the parents, of course, must submit themselves to the needs and the reality of the

child as they educate him; and this further need to go beyond themselves unites them spiritually to each other in many more profound ways than the sexual love could.

Nor are children alone; and it is not really best for a child to be an only child, because it is more difficult for him to see that he is not simply the master and the receiver of everything. When children are thrown together, they compete for what they need, and at the same time, in a healthy family, each receives all he needs, though not the undivided attention that he craves. They learn, thus, to accept the fact that they are not the be-all and end-all of existence, and share with their siblings less and less grudgingly as time goes on, and develop that very profound brotherly affection and acceptance which is so edifying to see, basically because it comes at such a price. But it is the normal training in human development; and human development is safest and surest in the presence of brothers and sisters, because the individual becomes most fully himself when he is open to others in true love.

Parental love and submission to the true reality of the children while not denying their own reality has, of course, several aberrations: First, there is the tendency to regard the offspring as an unwelcome by-product of the act of sex, not its culmination and pinnacle; and the "unwanted" child is then tossed aside and made to feel guilty at existing at all. Second, there is the "wanted" child who is wanted as another helping hand around the house or the farm, and who is brought up as a slave to the parents instead of as a person in his own right. Third, on the other side, there is the total submission of the parents to the child, and his spoiling, encouraging, out of a notion of "love," his development into a monster who can never be satisfied and who can satisfy no one else. Fourth, there is the "loving" direction of the child "for his own good" which never allows him to take a step for himself and which turns him into a

pusillanimous mass of phobias when he finally must venture out on his own.

No one, of course, ever commits these atrocities to his own children; everyone always raises them the "right" way. Even the incestuous parent is (in his own mind) trying to introduce his child to sex rather than violating his reality. Every one of these horrors, even when they go to extremes, believes itself to be proper and virtuous, and denounces everything else as the opposite extreme. This is the difficulty that fallen human nature has to contend with. From outside we can see the evil clearly; we can even see it when it isn't there. From inside, the evil is promoted as the good. But we very rarely try to study the facts.

Still, it is true that the human being's most powerful and selfish drive takes him out of himself into others, and unites the others round him in a community that does not have self-interest as its goal. Each parent is interested more in the other parent and in the children than himself; and the children are forced out of self-interest by having to do what the parents tell them—the more so because they do not recognize or really believe when told that what they are ordered to do is for their sake rather than anyone else's. This is the way sexuality and its effects are constructed; but of course, since with the human being came evil, it is the most fertile ground for perversions into selfishness.

2: The human being for himself

Chapter 3

The human in and for himself: society.

I do not want to give the impression in this title that the individual becomes a vanishing "moment" suspended in that greater whole which is society. In Chapter 2 of Section 3 of the sixth part, I tried to show that a society which pretended to be a super-organism was an aberration. The society, as I said, is for the individuals in it, not the individuals for the society; but still it is the case that without society individuals cannot live human lives. Hence, it is with others that the individual human being becomes himself; we are not alone, and if we cut ourselves off from others, we cut ourselves off from ourselves.

The simplest and first and most natural society is the family, in which the brothers and sisters are all under the authority of the parents, and must subordinate their desires to the will of someone who is initially stronger than they, and who can physically and mentally punish and even physically and mentally abuse them.

The fact that the parents have authority over the children, and the fact that they must punish but are stronger than they, in addition to the fact that the children are naturally selfish and rebellious (and therefore provoke terrible anger) forces the parents to be much more sophisticated in their loving actions than they had to be toward each other, or they will simply kill or maim the children. Hence, they learn to do what is painful because what is

painful is helpful; but at the same time, in inflicting pain, they learn to do so in a way that does no damage. Unfortunately, this is learned by trial and error, and every child to some extent is damaged by the most well-intentioned and even intelligent parents; because each child is a new encyclopedia of humanity, for which the rules that apply in general, or even that worked with other children, are inappropriate. Love learns humility in that it so often fails those it loves most.

The other side to this is that God has made children incredibly resilient; and so even with abusive parents, their fragile selves are seldom broken; and though the young tree is bent, it tends to straighten toward the light, and often in adulthood, the original twisting not only makes no real difference, it cannot even be detected. This is no excuse for abuse, of course, but abuse does build character; it is those who are spoiled who are in most danger—which is what the word "spoiling" implies. Parents need not try to raise their children in fear and trembling, but in love and affection, trusting in God who makes everything work out for good for those who love him.

The child, in being forced to obey, learns that self-will is not necessarily always to be desired, and that authority has wisdom behind it, and is not mere coercion; because it too often happens that a child is forced to do something he hates, and then later recognizes that if he had not done it, he would have been much worse off than he is now.

In any case, the first "we" was the family, those under the power of the parents and united among themselves by submission to the common authority. The "I" discovered itself only in this "we," and regarded its reality at first, not as an "independent" Lockean individual, but as a kind of part of the greater whole.

Meanwhile, the family was cooperatively seeking to survive

by using up the surrounding world, first as gatherers and especially as hunters. The first economic activity of mankind, then, used the forces of destruction (clubs, spears, and arrows) as forces of production; and in destroying those animals larger than themselves but less than themselves, they themselves developed.

Not surprisingly, these same forces of production could easily be used against other human beings, who not only could be used as food, but also were rivals for the food supply consisting of other animals. Members of other families were not recognized as "us," and so became victims of "our" predation and predators to be guarded against. No one kills and eats one of "us"; that is the great crime; but this does not apply to "them." Many names of tribes are simply the tribal word for "the people."

But the brothers found mates outside the family and returned with these new people, who had somehow to be absorbed into "us." But when the sisters were taken by men from other families, what happened to them? It then became less easy to regard "them" as mere animals to kill and be killed by; because "they" then included some of "us," and "we" included some of "them." In many ways, the problem was solved by not regarding the women as really human. But, given sexual love, and the power a woman has over a man in love with her, this is not easy to sustain; and thus the "we" began to expand, and tribes began to be formed.

The parents, of course, grew old and feeble and the children mature and strong. But still the parents commanded, and the children, having learned that the force exerted on them was more moral than physical, based on wisdom, still obeyed and deferred to the greater experience and wisdom of their elders, whom they now took care of physically as if they were the parents and the elders the children. Thus, authority freed itself from the physical embodiment it had in the strength of the parents, and was recognized as

something spiritual.

The great crisis in authority comes when the parents die. The children by this time would have been fathers and mothers of their own children, and so they exerted authority over them; but they would recognize their own lack of wisdom, and be at a loss, feeling now the need for authority and guidance, but not having anyone visible to give it to them.

And it is this experience, I take it, which is the beginning of religion. The fact that the child who is to take over authority still finds himself somehow under authority, but under no visible authority, would naturally lead him to assume that his parent is still watching over him. At this early stage, an afterlife of reward and punishment had probably not occurred to anyone, because in a close-knit tribe, where everyone is a relative of everyone else, no one can really get away with anything without being punished.

In practice, however, as tribes intermingled in the early days of human evolution, it would have begun to be less and less clear who the gods were, since the wives would have brought their gods into the tribe. Superior and inferior god-ancestors would then begin to appear, with the ancestors of the full-blooded members of the tribe the most important of the gods. Thus, it was love that created the realization that those outside the tribe were also human beings (if of an inferior sort), and also which led people away from a simplistic interpretation of the divinity into something responsible for more than mere tribal discipline.

Perhaps it was the need to remind himself of the dead ancestor, or perhaps it was simply the awareness (from seeing stones like chalk make marks and berries make stains) that he could create images that re-evoke the same emotions as the object, that led even the primitive human being to make works of art of astonishing beauty and sophistication. The full capacity of the intellect has been

with us from the very beginning, as the cave paintings in France show.

Rather early in human development someone also discovered (possibly from noticing what grew from the dump) that seeds could be planted and grow into crops; and at this point, the human being found out that he could use the world, not by destroying it, but by cooperating with it, and with a little patience and not much effort, he could live in abundance. Once this idea of cooperating with the world occurred to him, he soon found that he could also raise animals by penning them up, and no longer needed to search them out. Here again we find that one of the most significant advances in human development was that of submission to reality and cooperation with it, rather than destructive domination of it.

But there was a dark side to this, as to everything human. Farming and cattle raising led to the need to exclude others from one's own property; and since the earliest means of production were weapons, the weapons were now used for protection; but it was not long before someone discovered that he did not need to kill the raiders, but could capture them and pen them up like animals, and make them work for him, simultaneously intimidating them with his weapons and promising them an easier life from his farm. Thus began the practice of slavery. Since those outside the tribe were not really human, but were very close to being human, they could, if treated skillfully, do all the work, and the masters would only have to watch over them. And here were the seeds of the leisure class that Marx made so much of.

But of course the master class was really the warrior class, and to keep in practice it had to find people to fight with; and so there were battles between tribes that continued until some peacemaker allowed the people to see that killing each other was counterproductive, and that merging the tribes into a single nation

would make them stronger.

Thus, inter-tribal cooperation, not domination, was what allowed the expansion of the "we" to include all the members of the other tribe. When there is domination, the dominated are regarded as subhuman, not belonging to "us"; they are our slaves. Here, there was a recognition of the humanity of the other tribes, which also made sense out of intermarriage.

Further, with greater numbers in the nation, specialization arose. I mentioned the warrior class and the slave class; but there would also have been the farmers and the cattlemen; and there would have to be police also, not only to watch over the slaves, but to keep order among the members of the nation.

Amalgamation of the tribes also, of course, put the various tribal gods on an equal footing; but now, with worship of what was not really one's ancestor, it was not at all clear why one worshiped at all—except that there was as much as ever the need for an internalization of the commands coming from the one in authority, or no police force would be able to hold the people in check.

So Marx's notion that religion acted as a means for having people obey orders has truth in it; but it was not, I think, really a means of one class's dominating the others, for two reasons: first, everyone except the king was subject to authority (and even the king was, to some extent), and second, who would control the priests if it was simply cynical manipulation? They would have been the ones who held the real power. No, the early people really believed that there were invisible forces that controlled them. As we have seen in the earlier pages in this book, this belief has a firm evidential foundation in the world; and it would not be surprising, if God created people with limitations that they had to accept, for him to have created them in such a way that they could naturally discover the fact.

3: The human in and for himself: society

Finally, when nations became more complex and found that they had needs or at least wants that extended beyond their borders, they began cooperating on a new level, by bartering what they had with their neighbors (and those more distant) who would take it for what they wanted. This trade led to the invention of money, and also to the invention of written language, as the need to keep records of trade became pressing; and this brought mankind to the threshold of civilization.

Observing human beings at this stage, we find that the notion of "we" and of belongingness is much stronger than the notion of "I" and autonomy. It is the tribe or nation which acts; the individual is of very little account within it. In fact, if he is captured, he loses his status of human being altogether, and becomes like the house pet or the ox in the field. If he should escape back to his own nation, however, he becomes a human being again.

We also find that the means of cooperation, money and wealth, are also used as means of domination, with the rich able to afford men with weapons to protect them, and the rich nations able to buy armies with which they can lord it over and dominate their poorer neighbors. But on the other side of this coin, wealth also created a true leisure class, which could think about the meaning of life and the world; and this was what really led to further advance.

Section 4
Ancient Civilization

Chapter 1

Civilization and history

With civilization comes history, of course, because now there are records consciously kept, as Hegel says, and we know what happened because we are told what happened, and need not argue from nothing but the detritus of living.

Tracing what happens in history is very difficult, because it depends on what one wants to consider "progress toward a purpose," and that depends on the purpose. For Hegel, for instance, it was the self-discovery of Spirit in the world; for Marx, the march away from exploitation of the many by the few.

Still, I think it fair to say that we can look at certain civilizations as in equilibrium, lasting for century upon century with changes going on within them, but without any significant change in the civilization itself. It maintains its basic manner of interacting among the people, and its basic idea of what it is to be a person, as well as the basic way the person relates to the material world around him.

Those who are caught up in the mystique of "progress" are apt to regard such civilizations as having stagnated; but this is a value judgment that is not called for. From their point of view, those in "more progressive" societies are simply floundering in a morass of ignorance, not having yet discovered the true meaning of human existence, and not having found a manner of living which works. What from a more "progressive" point of view is looked at as a naive or primitive notion of human living is looked on from their point of view as more profound and less encrusted with sophisms.

For all the learning we have in the West so painfully come

by, we have not increased our happiness significantly, it seems to me. We have more complex ways of being happy; but by the same token, we have more complex ways of being miserable. And this is significant, because happiness consists, as I said, in the recognition that one is what one has chosen to be. The price we in the West paid for the vast unfolding of opportunity is twofold: we are in anguish either because we can't decide which of the many possible roads to follow, or because we set our goals beyond our real possibilities and strive after the absurd. It is time to smash the idol of "progress," and put the pieces into the bin of those fetishes that promise but cannot satisfy.

I do not want by this to reverse the value judgment and say that stopping a process is better than continuing; it is just that, first of all, process as such is always headed somewhere, and process for its own sake is an absurd form of equilibrium, like walking on a treadmill.

Hence, if there is a civilization in process, and I think we can say that this is Western and non-Muslim civilization, it is useful to look at it and see if we can see what is developing, and how it is developing, and perhaps discover what the purpose is and whether and to what extent we want the goal that we have unthinkingly headed ourselves towards, and to what extent we should modify what we are doing to get somewhere we would like to be.

Chapter 2

Civilizations in equilibrium

First, then, let us look fleetingly at the civilizations (except for the Muslim, which will come in its course) which are in equilibrium: the Chinese and Indian civilizations. Of course, I now speak of what I guess we would call "ancient" or "traditional" Chinese and Indian civilizations, rather than the modern Marxist civilization in China and the Westernized civilization in India. There are variants of these two, of course; the Japanese had their own version of the Chinese civilization, for instance.

Chinese civilization and its offshoots seem to be characterized by respect for elders, and respect for authority; Confucius perhaps articulated the spirit of the Oriental civilization most clearly. The gods here are ancestral spirits, not surprisingly; and the individual's individual life is regarded as the animal part of his existence, subordinate to his human life, which is thought to be his position in the family and the various organizations he belongs to, including the larger society. He must not at all costs bring disgrace on the groups he belongs to; and he can remedy the wrong he has done by a ritual act of destroying his animal life. The rules of conduct are rules of politeness and fitting in properly to one's position in society. The structure of government is, not surprisingly, autocratic, with the ruler having the status of a god. Thus, Oriental civilization, it might be said, is the condition I described at the end of the

preceding section institutionalized; and it has worked very well for thousands of years, leading to various advances in technology and so forth. Only recently (within my lifetime, in fact) has it run into difficulty with the inroads of the individualist-collectivist philosophy of Marx, which (as Mao modified it) fit in many ways very well into the Chinese spirit of cooperativeness, and seemed to satisfy the individual's desire to have the importance the West gave him. But it seems at present to be failing, due to the inherent contradiction in Communism's "totalitarianism for the sake of the individual." Because China never really had a notion of the individual as an end in himself, Communism seems to be lasting longer there than in the West.

Note that, in terms of the hypothesis I offered about evolution, this particular equilibrium defines love as respect and politeness; but it seems to be primarily external, and to become internal by means of the external practices. The society is not for the individual, the individual is for the society; and it is not that the society makes the individual good, but that good individuals are necessary for society to be good.

The reason this civilization is in equilibrium and can last so long is that for this mentality, since the individual does not matter, then technology makes really little difference, and it is possible for great technological sophistication to exist in some places, and the most primitive methods of doing things in others. Insofar as technology makes the whole society powerful, of course, then it could be adopted, as in Japan, and developed much more thoroughly than in the West, which does not have such a cooperative spirit. But this type of civilization is undermined by the notion of the dignity and importance of the individual as such; and there are signs that it is changing as this idea becomes accepted as the truth about human beings.

The other civilization which was in equilibrium for millennia was that of India. Here, it seems, the underlying source of authority is thought to be what Hegel called abstract Being: that is, what everything has in common. It is this that is the only real reality (the Brahm), including the reality of ourselves; and everything else, all of the various forms of realities we see, is a dream. There is some truth in this, in the sense that every finite reality is inherently contradictory, and only unqualified reality makes sense by itself, as I said in the first part of this book.

But obviously, I think that the Indian interpretation does not fit the facts; but it is not my purpose here to critique the view, but show how it colors the whole civilization. The god, or rather, what is behind and beyond even the gods, is self-identical, serene, and unchanging, while everything else is unreal, apart from itself, and in turmoil. Hence, the real purpose of life is to get in touch with this reality (which is within each of us as well as everywhere else, since nothing individual is real), and to avoid getting caught up in the world of dreams and striving. It simply does not matter what position one is in in this world, because that is unreal; and anyone can achieve serenity and union with reality (and so everything) by turning away from the world of activity and resting within himself in that core of his being which is his only truth.

India, then, had a caste system, where a person was born into a condition of life and lived it out without hope of moving into another caste, except by death and reincarnation upward or downward; except that escape from this wheel was possible by repudiating this world and contemplation. There were various methods of doing this; but the goal was always the same: find the truth as not in the world, and reject the world and its illusions. This civilization, of course, did not go beyond itself precisely because its view of the truth lay in rejecting process as meaningful.

As to how people relate in love in this civilization, as the Buddha said, this is by way of compassion. The highest form of love is a kind of pity for those people caught up in the wheel of activity and suffering by it, since they do not realize that the life they are living and consequently the suffering they experience is not real. The task of the enlightened is not to change the conditions for the suffering people so much as it is to inform them of how they can escape the suffering by contemplation, no matter what their external situation. The Indian respects everyone equally, in that everyone externally is an illusion, and everyone internally is absolutely identical with everyone and everything else. This looks, from the point of view of the hypothesis of this book, very much like a negative moment in equilibrium; "love" in this sense could as easily be called indifference as love, and "respect" contempt.

The Indian civilization can also absorb technology and even new social structures without really changing, because for the Indian, nothing in this world really matters. Preserving the old ways is of no more real importance than taking on new ways; everything is a chase after wind. Hence, if those who are unenlightened want to live in a democracy without castes, let there be one; if they want to import technology or even study it for themselves, so be it; this is no more foolish than anything else, and those who are truly wise will still seek serenity in contemplation, no matter what is going on around them. There is very little that can shake this way of thinking, and so I suspect that the Indian *Weltanschauung* will last a very long time still.

Chapter 3

The ancient West

It should be obvious to any reader that I owe a lot to Hegel for what I am saying. Since I agree with him that the defining aspect of a civilization is its attitude toward human life, then it should come as no surprise if we think alike in large measure.

At any rate, the reason Western civilization is important to study is that it underwent crucial changes, and is in process; and we can't see what we are doing to ourselves unless we understand what is going on in the process. Studying who ruled what kingdom and who conquered what territory has about the same significance as studying those things in China or India; it is something interesting to know, but it does not really tell you who you are and where you are going. "Those who do not know history are doomed to repeat it" applies only when history is a process of the civilization itself; because otherwise, why would repeating history be a "doom"? That is, repeating history is only a "mistake" if history is headed somewhere, and the repetition takes one back a step instead of a step closer to the goal. But Western civilization seems definitely to be headed somewhere, and the question is where; and the answer seems to be discoverable by extrapolation from how we got from the threshold of civilization to where we are now.

Ancient civilization in the West, as I see it, turned itself outward beyond the self and beyond the family to find the source of

authority; and it basically found this in the forces of nature, which had to be obeyed just as much as the ruler of the nation had to be obeyed; and the punishment was just as sure and swift and ruthless if its laws were violated. Authority thus was looked on as an external force imposed on human beings, making them cooperate not only with themselves but with the world around them.

The "we," then, in a certain sense included nature, which was subject to the same laws that human beings were; and so it was natural that as this civilization developed, the gods would take on a human character, like that of human authorities. They formed a little nation of immortals of their own; and the conflict of the forces of nature was portrayed as the bickering of people in a society.

There was in the ancient world no notion of the individual as of any importance; and so if one person sinned, the whole nation was apt to be punished by the gods. Hence, if harm to the nation could be achieved by destroying one person, he was to be destroyed. The citizens of the nation, of course, were the only real human beings, in spite of this solidarity the ancients felt with all of nature; those of other nations were barbarians (this is the Greek word for "foreigner" and it retains today the Greek attitude toward foreigners), and could be enslaved.

Regarding the forces of nature as authorities having human characteristics was not, I think, as Comte would have it, a naive way of looking at things, but an advance, because it lifted what was going on in the world from a mere blind cause-and-effect sequence to something that could be considered to have reason behind it. The gods could know what was going on among the people and could actually wreak vengeance on them for violating their decrees.

There was at this time no notion of history as progress; if anything, things were cyclic, more or less like the seasons, with events only superficially changing but coming round again in due

course. No one thought that there was a beginning to everything or a direction to the world; it was accepted, like the gods, as "just there."

But this notion of the gods as personifications of natural forces led human beings to investigate the natural forces themselves, to see if some unifying principle could be discovered for how they worked; and thus philosophy—or better, science—began. The first unifying principle was that of what everything was made of and got transformed out of (one of the four "elements" or something underneath all of them), (Thales, Anaximines, Anaximander, etc.) and then process itself and its underlying dynamism or energy (called "fire") was seen as what unified everything (Heraclitus). This was immediately contradicted by a Western version of the Indian view of the underlying stability of Being (Parmenides).

This led to a new kind of world view in the ancient world; the gods in their personified form were thought to be imaginative ways of presenting the invisible realities argued to by Plato and Aristotle; and the world split into the naive and the sophisticated, with the naive actually believing in gods like the traditional ones, and the sophisticated aware that these were myths for natural forces directed by a hierarchy of intelligent beings who were themselves indifferent to what was happening, but who had an effect on the world nonetheless. (Incidentally, this view with the earth at the center of the universe was thought to put earth in the least important position; it was the universe's garbage-dump, so to speak. The gods and the bodies that followed them were greater and greater toward the circumference.)

Examining the world led to considerable scientific and technological advance, though the technology was not really directed toward making human living easier, because the citizens had their living made easy by slaves—who had to be kept busy if for no other

reason than that an idle slave is one who thinks about freedom.

But because of the presence of slavery, the master-slave relation permeated the thinking of the people, all the more because anyone could be made a slave. And this developed into the Stoic idea that everyone is a slave to the gods, from the Emperor to the lowest worker; and therefore that everyone is also free, if he chooses to do what he must do. This, of course, is an anti-love sophistry, since if everyone is free in the only significant sense, no one need bother about slavery; and in fact in those days slavery was thought to be perfectly natural, and Aristotle even said that certain people were by nature slaves.

As to the role of civil society, it was to make people good human beings. There was no clear distinction at this time between morality and legality, or for that matter between morals and customs; both were "what must be done" or what was expected by the society and by nature; and the function of society was to put people in government who knew what human goodness was and would impose it by law upon the masses who knew no better. In China, as we saw, good citizens made a good society; here in the ancient West, the good society made good citizens.

While this implied an orientation toward the citizens, it was not yet a real recognition of the individual citizens as each of importance, but rather of the citizens collectively. Plato had no trouble in proposing that the ideal society would force people into the roles they were most capable of, whether they liked what they would be doing or not. His idea was that they would be happiest if they were doing what they were most suited for, and therefore should be compelled to do it. The Greeks, like everyone else, thought that goodness was something objective, and the wise could discover it and force it upon the foolish—to their benefit, of course, which they would presumably discover once they had had a bit of practice

pursuing the good.

Quite early in the ancient period, God intervened to reveal himself to the Hebrew people as the creator and absolute master of everything, and also as the sole and ultimate lawgiver for the world and for everyone; but most of all for his people, with whom he entered into a special treaty-relationship. Note that he did this in the Western world (even though in the eastern part of it), but very early as civilizations emerged. Western civilization with its belief in one God was not, in that sense, a late development; it happened before the Buddha, for instance

But the point here is that God was revealing himself consistently with the general mentality of the people themselves, who were imbued with the notion of citizenship and obedience to authority. This again shows his respect for his creatures.

The treaty God made with Abraham and his descendants involved this: If the people obeyed his laws, they would prosper; if they disobeyed, they would suffer. He informed them of the fall and of his promise, and told them that somehow the fulfillment of that promise would come through them to all mankind.

But in spite of the fact that the revelation was consistent with the people's receptivity, there were several senses in which the Hebrew view of the world and God was far beyond where its contemporaries could reach. First, there was the notion that everything began and had a purpose it was developing towards. Second, that God was invisible and not like anything on earth at all; but personal, not the same as abstract Being; that he was not the ultimate unifying force of nature, like a world-soul, still less the greatest in a hierarchy of invisible beings. Third, that he was wholly benevolent, not something now magnanimous and now malicious. And fourth, there was the insight into the limits of human nature that came from the Commandments. The pagans gradually

discovered through their own thinking some of these things; but the Hebrews had it handed to them from the beginning, and spent their history struggling with the implications of it.

They were constantly plagued with the temptation to regard YHWH as the greatest of the gods, not the only one; and when they did this, they suffered plagues and conquests. They also made the mistake of wanting a king like other nations, because they could not bring themselves to be ruled by something invisible; and their kings, having married, led them astray in various ways—until finally the whole people disappeared, led off into captivity in Babylon. It was there that the Law was seen as applying to the individual, and the problem of individual punishment and reward came to the fore.

The exile of the people purified them of many of their paganizing tendencies and restored their faith in YHWH; and it allowed them to glimpse also that the solution to the problem of obedience was not in what happened to the people as such, nor to individuals in this life, but must have to do with the life after death. But the negative side of this was that obedience to the Law became the whole *raison d'être* of human living, stultifying human development and human relations.

Thus, the attitude of all the peoples at this time a couple of centuries before the Christian era was that humanity meant citizenship in a nation among other nations basically at war with each other, and it implied empires created by way of conquest and subjugation of other peoples. Even the Hebrews themselves conceived of their mission as that of conquest of the other nations under the Prince who was the successor of David, and who, like Alexander, would conquer everyone and make them bow down before YHWH and the King he was to anoint. Needless to say, they more than any of the other ancient lands could not tolerate being under the thumb of a conqueror.

At this point, the organizing Romans stepped into the arena of the developing world. By instituting the concept of the *persona,* they were able not simply to conquer, but to establish a spiritual bond among the nations, handing out honorary citizenship to foreigners, and thus bringing the concept of "we" beyond mere national or ethnic boundaries. They also let the people keep their own form of worship and government (as long as they acknowledged also the Roman gods, especially the Emperor), and only exacted a tribute in money for their subjection—something which was not excessively onerous. It was basically a recipe for harmony among nations, preserving both nationalism and a common bond among all peoples; and once Augustus had, like Alexander, conquered the whole world, the world was at peace.

There is one other important factor to the attitude prevalent at the time. A slave, apparently, regarded himself as a kind of tool or instrument of his master, since it was the master's will which directed his acts. But since a tool in Greek is an *organon,* and this was what Aristotle called the functioning parts of the body, there was the implication that a slave was a kind of part of the master's body, or an extension of it. This attitude universalized itself, as it were, in the Stoic notion of the whole universe as one living body, unified by the world-soul, with each of us as an organ in it, with a function in relation to the whole.

Chapter 4

The second fall

The mentality of the world had developed to the point where the promise given to mankind after its fall could be fulfilled. Philosophically, the world was ready to accept an eternal, unchanging, invisible, and benevolent Master of the whole universe and all mankind, who would unite it into one family, or even one living body. The chosen people already had this notion (with the exception of the world-organism), and had seen how it was the fulfillment of the gropings of the philosophers. Everyone had been searching for a moral code that made sense, and had made a good deal of progress toward one, and it involved legislating morality with the purpose of making people truly human; and of course, the Hebrews had that *par excellence.*

But much learning still had to be done. I am convinced that Jesus' mission was to restore what was lost by Adam; and so he had to lead people on to know that death was to be abolished in the new order under his kingship, and that the whole world would be transformed by him and his people into a place of human fellowship and individual dignity: into a place where harm and sickness would no longer attack mankind, and every tear would be wiped away. He did this by curing people and even raising the dead. YHWH was to govern his people forever, not any longer from without as an invisible king, but embodied in Jesus.

But to do this, he had to be accepted by his people, first of all. Accepted not as a new David, who would drive out the Romans and take over the world by conquest, but as something totally and entirely different: someone who could even make the winds and the sea obey him, but who did nothing domineering, who acted as much as a servant as a Master; who was a friend among friends. He had to be accepted as the incarnation of YHWH himself and on terms under which the people were to recognize that if they did accept him, they would never die.

If he was accepted, history would have stopped, as it had in China and India. People would have learned more, and there would have been changes, doubtless, as there were superficially in China and India; but the search for life's meaning would have been over, because it would be there on earth for everyone to see: each person's being able to develop himself to the full and then continue forever, in a world in harmony, where the lion would lie down with the lamb and eat hay like an ox, and swords would be beaten into plowshares.

But he was not accepted; the people found him too much for them, and the promise he held out to them too fantastic and too good to be true. And when the leaders of the people made up their minds that he was a blasphemer and his miracles nothing but fraudulent magic tricks, the others who had been convinced by what they had seen now doubted their own eyes, and turned against him. Once again mankind fell, and lost the gift that was handed to them.

Do not be harsh on the Jews. If you were there, would you really have believed that if Jesus took over the throne, you would never die? If your religious leaders couldn't believe it? Would you, having been brought up from your infancy to regard YHWH as the totally other, have been able to believe that this man was not only his son (as if YHWH were Jupiter) but YHWH himself visibly present and speaking like any other man—except that no man ever spoke the

way that man spoke. I doubt it. Not really believe it.

The conditions for the possibility of the belief were there; mankind had developed a sophistication that might have made it possible. But basically, it was just too good to be true, and a "realistic" notion of the world forbade it; and so, in the person of our representatives the Jews, and with the approval and under the ultimate authority of the Roman Emperor, we once again rejected YHWH.

But here is where the second instance of cheating on God's part took place. Knowing that our lack of faith was due to weakness rather than malice, that it was a question of skepticism due to our being in a foundering boat with him apparently asleep in the stern, God brought redemption out of the rejection itself.

Unfortunately, the restoration of human nature to its logical condition of being an immortal incarnate spirit in control of itself did not occur. Having rejected Jesus, it is now only through faith in him as having conquered the death we imposed on him and in undergoing death ourselves that we will ultimately emerge in that blessed state on the last day, when the history we struggle through will have been over.

But at this point, a fundamental change came in human nature. It no longer was merely human nature, not even the pristine human nature that existed before the fall. Human beings who believed in Jesus now shared his life, and the myth behind the Stoic philosophy came true; these humans actually lived also with the divine life of YHWH, and became literally one body, while still living their individual natural lives. The "we," the plural "I," was now given a much more literal sense than was possible naturally, though people seemed (and still seem) always to have a yearning for it, as can be seen from the tendency to form totalitarian societies.

There were still many things that mankind could learn about

itself, and many changes that it could bring upon itself; but because of the second fall, it would have to do this as it had been doing it, by searching and painfully developing, by bringing them out of itself by its own efforts (now aided by the assistance of Jesus, guiding through the community he founded), until the point where we ourselves, as it were, can have evolved to where our relationships can be much more like God's love within himself and for us. This is the "omega point" that Teilhard de Chardin spoke of for evolution.

But it must be stressed that the "omega point" will not inevitably be reached, precisely because it depends on our acceptance of the gift offered to us. We *can* reject God utterly, though it is unlikely that all of us will; but because of this second rejection of God, it will doubtless be the case that the final condition of the world (and its eternal state, since evolution will stop when history stops) will be considerably less than what it otherwise might have been, in significant respects. And we can see this. We have advanced in many ways; but in the important things, we are not much farther along than were the people of ancient Rome.

But the probability is that in some senses the final state of mankind—its final equilibrium—will be greater than it would have been if we had not rejected Jesus and history had stopped with his being declared king forever—and it certainly *can* be much greater, if we choose to make it so. God is that way. It is not that he brings a greater good out of every evil, but that some evils do result in greater good when the sin is more ignorance than deliberate malice. "Father, forgive them," he said. "They do not know what they are doing."

But from this point on, the world has been in two camps, or in Augustine's two cities: those who accept the facts about Jesus, and those who reject them; and they are basically at war with each other, since they have antithetical views of human development. And now the issue is squarely one of love. Those who belong to Jesus are to

"love one another in the same way I have loved you," or to love with that absolutely unselfish superhuman love that Jesus had for us when he "emptied himself and took the form of a slave." As Augustine put it, this city is made up of those who "love God even to the contempt of themselves." And the other city is those who "love themselves even to the contempt of God."

The camp allied with Jesus, as John portrayed in *Revelation,* will always appear to be failing, but will always be winning; and the other, secular camp, will be dominant always, but will have already lost the battle.

Section 5
Medieval Civilization

Chapter 1

The Christians and the pagans

The original "we" of the Christians was just the small number of members of the community, though it was clear that they had the mission of extending the message, and so the roll of believers, throughout the whole world.

The early Christians were in an absurd position, of course, and brought upon themselves a good deal of ridicule with all their talk about being emissaries of this "Prince" of theirs who had been killed (and as a criminal to boot), and was supposed to be waiting in the land of the dead to come back and claim the throne of the world. "Christian," of course, means "Prince-ist."

But more than that, the conflict between the two cities took place in earnest when the Romans discovered that the Christians would not worship Caesar in addition to their own god; and they were worse than the Jews, who at least kept themselves to themselves. These people were trying to win over everyone to this "true belief," which even seemed to have elements of cannibalism about it.

And so there was an attempt by the broad-minded Romans to destroy the narrow-minded Christians before they got destroyed themselves. It is not that the Christians were attacking them, or being disloyal citizens; as Paul's writings make clear, they were bending over backward to be obedient to the commands of Caesar and to give Caesar everything that belonged to Caesar. No, the fact was that the sophisticated Romans, who did not really stand for anything as true, were the ones who slaughtered the Christians, who

actually thought that there was something true. This was the first major instance of bigoted anti-bigotry. If religious wars dominated the world from the emergence of Islam onward, the first religious war was a war of secularists against religion; it wasn't "narrow-minded" religion that took the aggressive stance; it was secularism.

That is, the paganism of ancient Rome was not a deeply held conviction that there actually were the gods they worshiped; if anything, these gods represented the forces of nature. But the fact that they could shift around their worship to accommodate worship of the emperors showed that the religion was really window-dressing for something political. Rome used religion, and specifically worship of the emperor, as a symbolic way of declaring fealty to Rome's rule, not really as something religions. Thus, in spite of the fact that the Christians were persecuted and killed for not worshiping the Roman gods, they were really harassed for disloyalty to what was essentially a secular state.

And the Roman empire was not only secular, but incredibly corrupt. Even in Paul's day, the sophisticated engaged in practices that people of our present age of sexual revolution could take lessons from; and the aberrations in conduct got more ingenious as time went on. It is interesting that the decay of a people tends to show up in sexual excess, when the act of love is perverted into bizarre titillation for its own sake.

Because of this, many early Christians fled from society altogether and went by themselves or in small groups into the desert, where they could worship God in peace away from the temptations of "the world."

Chapter 2

The victory of Christianity

But from the earliest, the initial emissaries of this Prince had died rather than deny what they had seen with their own eyes; and this gave credibility to their testimony. So the belief spread that this crook who was killed was in fact the incarnation of the one God, and that by believing in him the sins each and all had committed could be erased and we could all be brought to sonship with God and brotherhood with one another—and that eternal life and happiness was waiting for those who remained faithful.

This created, of course, the bond that Rome had been trying to achieve with emperor-worship. But the kingdom that the Christians believed in was not in this world; even the visible leader of Christianity held no territory. There was therefore a complete divorce between religious and secular authority at the time, with the secular power relegated to the external order only, and the Prince of Christianity taking over hearts and minds.

But once Rome lost its grip on religion, it no longer could hold the empire together; and the result was a resurgence of nationalism and tribalism, even in the midst of the Empire; and the barbarian hordes began their attacks.

Christianity was accused of being responsible for this decline of the Roman Empire, and with a good deal of truth. But St. Augustine defended Christianity against guilt for what was

happening, showing (in the *City of God*) that the corruption of the Empire itself was what was making it crumble, not some kind of raid upon it by Christians because they were Christian.

St. Augustine also performed a magnificent amalgamation of Christianity with the scientific knowledge of the time (i.e. the secular philosophies), interpreting Plotinus and the Stoics particularly in the light of what he knew from Christian revelation. His brilliant synthesis destroyed what intellectual underpinnings were left of pagan life, and its decline from then on was precipitous.

But before this happened, the victory of Christianity over secularism was made complete—or at least apparently complete—when Constantine went over to the new religion and commanded that it be adopted by everyone in the Empire. He also moved to Constantinople in the eastern part of the empire, which in turn led Christianity itself into being more or less divided into two centers, with increasingly differing practices, though the same faith was preserved.

The attacks by the barbarians also brought about another factor in the shift from ancient society to medieval society. It became necessary for the people to defend themselves against these attackers, since the central army of Rome could no longer do so. Hence, those with wealth, fortified houses and horses (the knights) would take their Christian brothers of the lower classes into their houses for the duration of the attack, and would defend them from the northern invaders.

This led to an agreement between the wealthy and the poor in their environs: the wealthy promised to undertake the defense of all the people in exchange for the farmers' sharing their produce with their defenders. In theory, this was no longer a master-slave arrangement, but an agreement among equals (or at least, people of equal dignity before the Lord of lords). Everyone was recognized as

human; it was just that the division of labor had shifted.

At this point, then, the whole world was Christian, and so everyone was a brother or sister of everyone else. In the spiritual realm, the "we" had expanded in theory to include all of humanity. But this was merely implicit, and potential. People did not *think* of themselves as members of the whole world as a community; their real world was fragmented into small dukedoms with the lords defending their people against the attacking enemies; and the "we" in their consciousness ("for itself") became those living under the protection of a lord.

The lord technically had no real authority over his vassals, because he was their servant in the sense of their protector, while they were independent, as it were, except for the portion of their produce that they handed over in payment for his service. But in practice, since he held the forces of destruction while the people only held the forces of production, they became his slaves and he their master. Note that it is not simply the forces of production that give one power; the forces of destruction are much more efficient in achieving this, and they quickly acquire control over the forces of production.

Nevertheless, this new master/slave relationship was not what it was in appearance; and in this age, appearance was taken for what reality really was. Note the negative moment, the "for itself" here. Love for itself, the "we" for itself amounted to external fealty. The lord received homage for his service to the people, and the practice of *noblesse oblige* was supposed to (and did, really) provide duties for him to perform. The real truth about humanity was now something outside itself: "honor"; and one put his physical life at risk to keep the appearances intact. Here, the respect shown was not like that in China (to one's progenitors), but had a much more economic cast to it: the deference was not due to age or authority, but to the

service the protector was performing for the community; it was a deference which at least in principle recognized that all were fundamentally equal.

Of course, the protectors then had to justify their existence from time to time; and so they changed from simply defending the people from the barbarian invaders to defending the people from encroachments by neighboring dukes. But these dukes were also justifying their existence, and so the wars became as much a game as a serious enterprise (once again a matter of appearances), and alliances and enmities were formed and broken constantly—but everything *looked* right and proper. And, of course, the war activities eventually degenerated into games of tournaments and so on, and so the sham became aware of itself as not something really serious.

Since the protectors were in fact the ones in secular authority, then they acted as judges; and so trial by combat became the way of settling disputes, with the disputants choosing a champion, who fought a joust, on the assumption that God would only let the person whose cause was just win. This amounted, of course, to a manipulation of God, demanding that he make the person who was in the (spiritual) right the one who was physically victorious; but by the laws of nature, victory goes to the stronger, not the one who happens to support the correct side. And God does not act contrary to nature.

So not surprisingly, it didn't work, and great injustices were perpetrated.

All during this period there were religious disputes, some even involving bizarre practices such as getting oneself into a state of holiness and then starving oneself to death. There was, however, a centralized body, the ecumenical council, which met to decide such questions, and which excommunicated the dissenters, which generally speaking then dwindled into sects of no importance.

2: The victory of Christianity

Chapter 3

The Muslims

But in nomadic Arabia, Muhammad was thought to have had revelations from God, which altered what was known from the Hebrew and Christian Scriptures, and introduced a new religion which in many ways was antithetical to Christianity. There was but one God, and in no sense a Trinity; Jesus was a prophet, the second of three great prophets: Moses, Jesus, and Muhammad. He was not really killed on a cross, and certainly his revelation was not final.

The new religion was much more belligerent than Christianity, which had emphasized letting others trample upon one's rights. This religion was more of a "natural" religion, a seeing into the truth that was there in nature; but it included an afterlife of reward for those who followed its dictates and a punishment for those who did not. It not only permitted fighting, but endorsed wars for the sake of religion; and it allowed vengeance up to four times back and forth for wrongs committed. Further, it permitted polygamy, and put women into a position where they were not to be seen in public.

While it stressed brotherhood and tolerance, it was still the case that it regarded those who did not have the faith not merely as unenlightened and pitiable, but as also the enemy of God, and people who were, by force if necessary, to be brought into conformity with the truth. The Christians particularly were enemies,

because with their Trinitarian view of God, they committed the blasphemy of actually saying that Jesus was Allah; and this insult to God could not be permitted to happen. Unlike the Indian religion and philosophy, with its notion of a divine core in everything, Islam in principle was intolerant of any belief that denied what it held Allah to be, however tolerant the Muslims themselves might be.

Given that war was the order of the day, this religion struck a responsive chord in many people, especially the despised nomads at the eastern fringes of the early Roman empire. It spread by conquest over that area of the world, but the conquered were conquered spiritually as well as materially; and even the Eastern Roman Empire succumbed. Then Africa and Spain and even Sicily fell under the domination of the Muslims, though in Europe Islam did not really replace Christianity, but made at least a temporary accommodation with it.

The dominant position of Islam in its part of the world led to a good deal of leisure among the ruling Muslims; and scholars began studying the works that had survived from ancient times. It was the Arabs who gave the world the number system we now use, and who modified astronomy from Aristotle's rather crude system of spheres to the Ptolmaic view of the world; and the Muslim philosophers did significant work on Plato and especially Aristotle, whose writings (except for the logical works) had fallen into oblivion because they seemed so irreconcilable with Christianity.

They were also irreconcilable with Islam, however; and in fact, much of what was in the Koran was not something very compatible with what was being learned from the natural science researches of people like Aristotle. Thinkers like Averroes got away with continuing to study these pagan philosophers on the grounds that the Koran was Theological truth, which was believed, and Aristotle was philosophical truth, which was known; and both could be true

at the same time, even if they contradicted each other, since they were truths of different orders.

Meanwhile in the West, the encroachments of Islam became a great worry; and its taking over the Holy Land an outrage that galvanized the fragmented people into unifying at least to the extent of sending an expedition to the Holy Land to free it; and so the Crusades occurred, with the military clash between a more or less united Christendom and Islam.

The Crusades brought people of many places together in common cause, and accelerated the process (which had already been going on) of unifying the little dukedoms into kingdoms. There was even, with Charlemagne, the attempt to revive the Roman Empire under a Christian umbrella, with the Emperor subject in some sense to the Pope.

So the Christian "we," faced with a threat from outside, began to expand.

3: The Muslims

Chapter 4

The late medieval spirit

The medieval period, by the way, was by no means the dark ages intellectually. From the beginning, Christian thinkers had been doing serious work not only on the pagan philosophers, showing that Christianity was compatible with what was known from the science of the day, but they had been examining Scripture and showing how it was in fact consistent with itself, in spite of apparently contradictory statements.

At this time, the Pope had also acquired territory, and so now was a secular as well as a religious ruler; and this mixture of secular and religious power, especially with the notion that the religious head was superior to the secular, led to a good deal of confusion. The Popes thought of the heads of state as their vassals, while the heads of state looked at the Pope as having only religious authority; and so as rulers they were only nominally subject to him. But of course in this age appearance was everything, and so they *were* his subjects if they wanted their own subjects to be theirs.

The meddling of the Popes and of the clergy in general in secular affairs also led to corruption. The monasteries, for instance, were in effect dukedoms in their own right, involved in transactions with the lords and such around them. This was not helped by the fact that sons who were not to inherit land from their fathers were simply packed off to the monastery, whether they wanted to put God first

in their lives or not.

Partly because of the Muslim conquest of the Eastern Empire of Rome, the Eastern Christians were really cut off from their Roman counterparts even more than they had been because of Constantine's shift of the center of imperial power there; and a religious dispute between the two halves of the Church festered for centuries and finally led to a definite breakup of Christianity into two independent branches, each of which claimed to be orthodox, accusing the other of heresy.

Learning, of course, was left to the clergy in the Christian middle ages, because the civil authorities had grown up not out of the learned class in Rome, but out of the people who had horses and property and liked to fight; and of course the peasants had no time to learn anything. The monks, however, had not much to do except spend their time contemplating, studying, and even copying and preserving the ancient manuscripts that had been handed down.

It had also been discovered that trial by combat did not work; besides, cases of heresy should not be tried by having people fight each other. Hence, a board of enquiry among the learned (the clergy) was set up to decide cases by trying to dig up the evidence rather than just taking someone's word for it or seeing who won in a fight; and so the Inquisition was born. Once the facts of the matter had been discovered, the case was handed over to the secular authorities for punishment to be meted out. It is interesting that the Inquisition, which has such a bad name, was actually set up to correct an abuse, and was the forerunner of our modern law courts.

The Muslims in Spain gradually began to spread, if not their religion, at least their secular learning and philosophical investigations into the Christian world; and when they did, Aristotle and his empirical paganism with its multiple gods and extolling of pride dropped like a bomb onto Christian thought. Many thinkers, like St.

Bonaventure, wanted his books destroyed and consigned once again to oblivion, because they were too convincing, and were subversive of the Christian faith. Christianity, since it dealt with the facts about Jesus and not really the values that Jesus stood for, could not adopt a "two truth" attitude toward things. If something contradicted Christianity, only one of the two was true; and if Christianity was true, then Aristotle had to be false. That was all there was to it.

Fortunately for the advance of thought, there was St. Thomas Aquinas, who saw that that was not all there was to it. He was convinced that Christianity was true, of course; and therefore, if Aristotle was true, then it had to be compatible with Christianity. He therefore interpreted the various texts of Aristotle, and allowed Aristotle to critique himself, so to speak; and showed that if you did that, what he said was only superficially against Christianity, but on a deeper level was not only compatible with it, but illuminated it greatly. His writings were still taught as late as my own philosophical training, they were that magnificent a philosophical system.

What characterized the medieval world, it seems to me, was the basic unity and brotherhood of Christianity (and also of Islam); but there was the secular fragmentation underneath it, which came together into greater unities under the unifying force of Christianity and the Islamic threat. The basic concept was brotherhood, not citizenship, and of the equal dignity of all as having the divine persons dwelling within them, which made for the spiritual unity of all mankind; and at least lip service was paid to the love that was owed everyone by the commands of Jesus. But an individual was loved as "another Christ," because God was within him; and he himself as an individual in his own right was not of much account. Lords still lorded it over their serfs, and parents over their children. It was still thought that a person received his dignity by his being a member of the community: the Christian community first and

foremost, and the civil community second, because secular authority also came from God—which was why the Church was thought to be superior to and over, in some sense, the state. It was thought that what was good for mankind was known in its fullness; and the only thing left was for the Church to put it into practice and enjoin it upon the people, while the State kept civil order.

The stopping of the Muslim threat—at least the checking of its further encroachments into Europe—led to a certain equilibrium in this world, in the midst of the territorial wars and so on, the philosophical disputes, and the Theological controversies. Islam was not destroyed, but held at bay, more or less permanently.

But within not many centuries, several things began to disturb the equilibrium.

First was trade. The traders began going to foreign lands and bringing back things that made them quite wealthy—and they began to want the privileges that the nobles had had, and were powerful enough to claim them, low-class though they were. Their success also made them interested in trading in places farther and farther off, and in finding new and more efficient routes of getting there.

The second was the corruption of the clergy. Their encroachments upon secular power led to a secularization of the clergy themselves. It became less and less evident why anyone should declare allegiance to one who was no holier than himself and in fact a ruler of alien territory, whose motives for making apparently ecclesiastical pronouncements were often patently economic or political, having nothing significant to do with the truth of the faith.

Theological disputations among the learned were becoming, not more secular, but increasingly esoteric; and while experts did not actually hold discussions on how many angels could dance on the head of a pin, their disputes became much less concerned with living a Christian life, least of all addressing themselves to the issue of the

increasingly secularized clergy, especially in the upper levels of the hierarchy.

The result was that those really concerned with Christian living tended to move into a new sort of desert, away from the Theologians and the clergy. “I would rather feel contrition,” said Thomas à Kempis, “than know how to define it;” and a kind of personal, mystical approach to Christianity sprang up among those who did not want to politicize their lives. These people also stood up to the religious authorities and began to denounce them for secularizing their religious posts.

Within a very short time of each other, this ferment broke in several directions: The Protestant Reformation, the Renaissance and rediscovery of the ancient pagan writings, coupled with a spreading of learning into the laity, and the discovery of the New World with its huge influx of gold. And that shifted the whole way of thinking and interacting into the beginning of what is the modern world, which I suspect I am now seeing the end of.

Section 6
Modern Civilization

Chapter 1

The Reformation and its consequences

If citizenship was what characterized the ancient period in Western civilization, and brotherhood the medieval period, individuality seems to be what characterizes the modern period. From the Protestant Reformation onward, we see greater and greater fragmentation and independence, not only of people from each other, but of areas of life from other areas of life.

The first thing that happened was that Christianity split apart in the Protestant Reformation. Luther's attempt at reform of the church failed, which produced something worse than a schism as happened with the withdrawal of the Eastern churches from union with Rome (since those churches could claim to trace their lineage back to Jesus' original emissaries as much as Rome could). But Luther was not a bishop; and so the only evidential basis for his dissent was Scripture, with the result that Scripture and not the community became the authority.

But of course that brought up the question of what Scripture is trying to say, since obviously Luther and the Catholics both admitted the words of Scripture, but gave different interpretations of them. The only thing Luther could offer to this was that personal interpretation of Scripture was somehow definitive—on the idea that the Holy Spirit was guiding you to interpret it in such a way that your interpretation would bring salvation for you.

Needless to say, this soon spawned numbers of different Protestant churches, each with its own interpretation of what Scripture was saying. But what is significant was that it was seminal for the view that a fact was no longer a fact, but a "fact for" a given

person. If you thought that "This is my body" meant a real presence of Jesus in the bread, then this was a fact for you; if someone else thought it didn't, then this was not a fact for him. And that, of course, made the individual the Supreme Court for the truth itself. The fragmentation had begun.

Trade was also creating great wealth for certain individuals, not because of the place in the community they were born into, but because of their efforts. They saw, as I said, no reason for not being treated like the nobles, and had the economic power to realize their ambitions. They became patrons of the arts even more than the nobles had been. Once banking and the multiplication of money was introduced, this wealth increased enormously; as it did when the New World was discovered, bringing huge quantities of gold into Europe. Leisure and learning spread.

But now one did not have to belong to the clergy to be educated, since those with money could afford it; and if personal interpretation of Scripture was to be the road to salvation, obviously everyone needed to be able to read Scripture for himself. Hence, education spread into the laity; and the advent of the printing press meant that books also could be had by more than just the very wealthy. And the new "personal interpretation" spirit led people to look at the ancient writings other than the Bible and interpret them for themselves; and so the Renaissance happened. And this was not only true in writings, but in the arts; Michelangelo went secretly into morgues to dissect corpses for himself to see anatomy at first hand, and Leonardo developed the laws of perspective. Art began to divorce itself from the pure service of religion.

Further, people began to examine for themselves the accepted science of the day, and not simply parrot Aristotle's observations. Copernicus proposed his ingenious sun-centered explanation for the apparent motions of the planets, and Galileo,

realizing that it meant, if true, that Aristotle's theory of why bodies fall was false, devised his experiments with rolling balls of different weights down an inclined plane, and observing that heavy things did not fall faster than light things—which destroyed the premise on which Aristotle developed the earth-centered view. He also built a telescope, in which he observed the moons of Jupiter apparently circling that planet. He then proposed that Copernicus' sun-centered universe was the scientifically true view of the universe, and tried to placate Catholic scholars who brought up Joshua against this that Theologically, the earth was at the center of the universe, but philosophically (i.e. scientifically), the sun was at the center.

But the Catholic Church was adamant against any "two truth" theory, the more so now because Protestantism was essentially proposing a "multiple truth" theory; and Cardinal Bellarmine cautioned Galileo against taking that tack when proposing his view. Galileo was called up before the Inquisition, and finally recanted. He was not himself, by the way, totally wedded to observation. When Kepler showed that, based on his observations, the orbits of the planets were elliptical and not circular, Galileo dismissed his findings as ridiculous, because of course God would not permit planets to move in such an imperfect figure.

Galileo also was the father of the Cartesian turn in philosophy, by proposing that the five senses were simply subjective reactions to things, and only measurement got at things as they really were. In that sense, we are more or less at the end of the Galilean age in thought.

But the controversy between Galileo and the Catholic Church showed that if science was to advance, it had to do so independently of the meddlings of the Theologians; and so not only art but science was now to develop independently of religion.

1: The Reformation and its consequences

Chapter 2

The individual and society

But it was not only the traders who were making money. Workers had banded together into guilds, where they could take advantage of specialization in making their products; and this division of labor made them more efficient, allowing them to do more than make a bare living off their products. The fact that there was much more money helped in their increasing prosperity. The guilds also freed the workers from dependence on their former lords, because they had a wider market for their products because of their association; and since they controlled the production, they could also demand higher prices. The guilds also were, of course, independent of each other. Eventually, they and the traders began to be so powerful that they were recognized as a "third estate" in society; and so they had an increasing say in government.

Civil societies were, because of the Reformation, not any longer held into a unit by the allegiance of all of them to the Catholic Church; and so various notions of society began to be formulated, from Thomas More's diatribe against absentee ownership of property by way of proposing an ideal society of "Nowhere" (Utopia) in the New World where people lived in communistic harmony, to Macchiavelli's ruthless pragmatism detailing how to get political power and hold on to it.

But what was needed was some non-religious way to account

for the authority of each king over his own subjects; and this was supplied by Thomas Hobbes, who was the forerunner of the modern view of human nature: that everyone in a "state of nature" was independent of everyone else, and at war for survival against everyone else; and so, in order to stay alive, people gave up all their rights to their sovereign, so that he could keep order. This gave the king power even over the religion of his subjects; and it apparently rested on scientific grounds, not religious ones, and so was not open to dispute. One of Hobbes's goals, in fact, seems to have been to undermine religion and replace it with science.

In spite of the fact that his theory made people in effect the complete slaves of the king, its premise was that each person "in the beginning" was a kind of king in his own right; and that society was the result of an agreement among these originally autonomous individuals. This was different from the source of the medieval notion of the agreement between the farmers and the protecting knights; there, there was not a notion of a sovereign individual, at war with every other sovereign individual for the economic necessities of life; it was an arrangement of protection of the community from the barbarians. Hobbes's point was that since nothing in "nature" was assigned to any individual in the "natural state," then each person had as much right to everything as everyone else, and hence was at war with everyone else simply to survive. So they agreed to a truce, and gave up their rights to the king.

This notion of the "naturally" autonomous individual, as if the "real" individual was the independent adult, completely ignoring the dependence of that same person as a child on others' service, was what Locke developed into what is basically our view of what it is to be human and how society follows from the notion of humanity: that each person was, in the "state of nature," independent of every other person, and possessed of the rights of life, liberty, and property (the

fruits of his labor); and that, not to ensure survival (since Locke didn't see that this initial state was a war), but to secure these rights, people freely agreed to be ruled by a sovereign, but kept the basic power in their own hands, and therefore the right to depose anyone who did not rule according to the initial agreement (i.e. who violated their rights).

Needless to say, once one takes into account that no one can get into this autonomous state without being anything but autonomous, then one realizes that the whole foundation of the modern view of man is a fantasy, and any notion that there ever was or could be an "initial agreement" vanishes into never-never land.

But there was, of course, the core of truth that it is the individual person who makes the choice of what his life is, within the limits of his real possibilities (and even outside those limits, where he becomes immoral), and who therefore defines the goals of his life and therefore what goodness means in his case. So the individual in fact is sovereign in one sense, but not autonomous; there are laws the individual is subject to: the laws of his nature, which include his social nature, and they are not of his own making, and he can do nothing about them. The modern world ignores this.

In any case, instead of having the economic relationship of rights and compensation flow from the social relationship of cooperation (which was the "true" one), as was found in medieval civilization, this view made the economic relationship the basic one, and reduced the social relationship of cooperation to a practical move whose purpose was basically the guarantee of independence.

Politically, this was the basis of a revival of the democratic form of government, beginning in that society which put into practice Locke's principle of repudiating the ruler who violated his subjects' rights to property. The spirit of the people seemed to be amenable to this; but in France a few years later, it was shown how

dreadful its consequences could be with a different attitude among the populace. Nevertheless, Europe and now the whole world has been developing toward some form of popular sovereignty based on the rights of the individual.

Economically, Locke's view of human nature, with its solution to the problem of property, led to the labor theory of value and modern economic theory in general (though work had begun on this earlier, with the Spanish Jesuits); and the Industrial Revolution, with its sudden increase in products at low prices, seemed to promise a future of unlimited wealth for nations.

The development of this took an interesting turn, however. The kind of thing proposed by Adam Smith justified the entrepreneur in seeking to maximize his own gain at the expense of his workers (though Smith did not intend this), with the idea that the "invisible hand" would bring everything right, just as it evidently did in the world of nature. Unfortunately, once we leave the world of nature and get into the world of free choice, God is not going to make our selfishness over into cooperation in spite of itself; and the factories became torture chambers.

Marx saw this, and showed the inherent contradictions in the working out of the labor theory of value. He interpreted the new view of humanity as meaning that human beings were the result solely of economics, and their development was essentially economic, toward final, true independence and self-possession. Interestingly, the road to the independent, totally self-possessed individual led through a "temporary" stage of absolute totalitarianism, where the government took control of all of the forces of production, and directed everyone like slaves until all societies all over the world became communistic, at which point "the state would wither away."

What he didn't notice was that the state held power because it controlled the forces of destruction; and once it controlled both

the forces of production and the forces of destruction, the rulers used these for their own advantage, and only paid lip service to the advance of the people toward material prosperity, and the prospect of "freedom" was a mockery and a perversion. Everything, in the name of independence, was reduced to slavish cooperation, with threats the only motivation; and the result was misery even surpassing the sweatshops that had inspired Marx.

But unbridled capitalism that ignores the humanity of others has internal contradictions, some of which Marx saw accurately; and so this, as it developed, led to corrections being made by government to protect the people who were being exploited. But that led to further and further government interference in business; but since government had no clear idea of what it was doing (not having any notion of the difference between values and necessities), government in the developed capitalist countries has been resembling communism more and more, and people cannot turn around without running into government regulations and government management of things—in spite of the evidence of the disaster this has brought on people in communist societies. Thus, an essentially individualistic outlook, coupled with "compassion" has been turning itself inside out into collectivism.

Chapter 3

Independence run rampant

Since this sketch is not intended to be anything but a hint, let that be enough to show the general tendency of human development since the Reformation, and let us take stock of where we are.

The result of all of this process—or at any rate, the stage we are at in the process—is that every human being, and every phase of every human being's life, is regarded as totally independent of everything else, with cooperation having only an economic motive of self-fulfillment—leaving in human beings a vast hunger for an aspect of their lives that they don't even realize exists.

Marriage and the family now are based on rights and the economic sort of cooperation. Self-interest is assumed to motivate marriage, and agreements are made by which the partners cooperate for their mutual benefit; and when this no longer occurs, they separate. Mothers claim absolute rights over their own bodies, even when there are children within them; I have had nursing students of mine defend a woman's right to make her fetus an alcoholic or a cocaine addict by her drinking or taking cocaine while pregnant. Children even after birth are to be cared for only in such a way that this does not interfere with the self-development of the parents. But they too have rights against their parents, and can have abortions without the parents' even knowing about it. The family is assumed

to be a small democracy, and children are often treated like little adults, having much more say over their own development than they can safely use.

Needless to say, once marriage is regarded in economic terms, as a question of rights, bizarre marital arrangement like same-sex marriage have sprung up, since homosexuals have a right to "define their world," as the Supreme Court has said, and therefore claim a right to the benefits and even the name of marriage. Any discrimination in favor of real marriage (now called "traditional" marriage) on the grounds of its benefit to children and the society is immediately countered with the "argument" that this is discrimination *against* homosexuals.

In economic relations, everything is, of course, rights and compensation; but there is the refusal on the part of those who provide necessities to see that they are exploiting those who are the beneficiaries of their service, and are making them as much economic victims as beneficiaries. Not having any notion that cooperation is also a part of human nature, they see no reason for lessening their self-fulfillment so that others can live human lives.

In politics everything is rights also; but "rights" turns out to be "interests" of the people who have Approved Victim status. Those groups like churches which have a view of humanity which involves cooperativeness as its motivating force, turn out to have no rights, and can be vilified and insulted and persecuted in the name of the freedom and dignity of the individual. But the "individual" is not the individual, but a person belonging to a given class; these people are to be given special help toward equality—often at the expense of their being able to act as equals. Whenever government intervenes positively on behalf of the downtrodden, it does what guarantees permanence in the status of being downtrodden.

In thought, truth has become totally individualized, with

one person's truth being the "truth for" him. This is true even in science; even physics nowadays is increasingly politicized, with "truths" based on the shakiest of evidence being used to advance a given political agenda. Physics has seemed to have discovered that the mere act of observation colors ineluctably what one is observing; and so this most objective of all sciences is saying that it is radical subjectivity. And if that is true of physics, it is all the more true of other sciences.

The sciences themselves are increasingly specialized and fragmented. Even multidisciplinary studies like physical chemistry are really specializations dealing only with the very narrow area of overlap between the disciplines, not a combination of the whole of both of them. The language, too, of any science is deliberately esoteric, to exclude even other scientists from the area. Even though other scientists might easily grasp the approach, they cannot simply read things outside of their own discipline, because to do so they would have to learn a whole new language.

In religion, respect for others' opinions and autonomy has taken over any question of factuality; and this not only between religious groups, but even within them. Catholic Theologians are demanding the "right" to "dissent respectfully" from Church teaching; Catholic nuns are interpreting their commitment to poverty, chastity, and obedience as the road to self-fulfillment and "freedom from oppression"—which turns out to be militant sexism in reverse. The Church is supposed to modernize and become democratic, with the dogmas accepted on the basis of "consensus," not facts.

In morality, the one evil is intolerance; and this view is promoted with absolute intolerance of any dissent whatever. In the name of "free speech" censorship abounds; in the name of "tolerance" those who hold that certain things are actually true and

that others are morally wrong are viciously put down.

This is no longer something that is characteristic of one society. With modern communications, the cultural attitude has spread through the whole world. Now every society to a greater or lesser extent is doing the same thing and looking on things in the same way—except for Islam, which has remained back in the medieval mode of thought. But how long it can hold out against modern influence is a question. I suspect that its war against the Western world was its own version of "suicide by cop" that certain criminals engage in when it attacked the United States and had the misfortune of having George W. Bush as President. It looks as if the war in Afghanistan and Iraq is going to lead to the Westernization of Islam, and that the religion will wither away into a formality. This, I think, is to the good, because there is much in Islam, such as the treatment of women and the incredibly harsh punishments that is anti-human.

But the condition of the present Western world is, I think, the result of the fact that the modern world was infected by Galileo and Descartes with the disease I spoke of at the very beginning of this book, volumes ago: that truth is basically subjective, and that we can make something be what we want it to be by simply declaring it to be that way, and stating that this is a "fact for" us and must be respected. But with all this power, we are impotent; for all our claims to reality, we are empty, and our emptiness is being driven home to us harder and harder as the days go on. Radical subjectivity means that everything is a dream; Kant's subjective objectivity is essential nothingness; and it has finally worked itself out in most of its implications in every area of our lives.

From the point of view of the thesis of this part, it is the absolute antithesis of love. Love is talked about a lot, but it means self-fulfillment and the economic relationship, not self-forgetfulness

or expansive generosity.

But everything has become so fragmented and compartmentalized, with people's lives at cross-purposes with themselves (not to mention each other) in so many and such complex ways that it cannot be anything but a negative moment in development; it must necessarily collapse, with the cooperative side of life somehow to be reinstated.

And I think that at the moment, since as I see it the core of this was the shift in *thought* brought about by the Reformation, the way to advance beyond this stage toward sanity once again (because there is no going back) is to show how Galileo and Descartes were wrong, but how the legitimate problems they saw were real problems, and how these problems can be solved.

That is what I have attempted to do by this book. I think it shows how life in all of its aspects can make sense; and my hope is that it can make some contribution in tying together all of these loose ends of our lives into a coherent whole, in accordance with what Paul told the people of Colossae: "And over and above this, put on love, which is the cord that ties perfection together; and then the Prince's peace should govern your hearts. This is what you were called to when you all became a single body."

I have no idea how valid these ideas of mine are, still less how they are ever to be disseminated in such a way that (if they are true) the world which so desperately needs to know them will ever find them out. I simply have put them down here so that after I die and fulfill my ambitions, they will be available to be found. As I write this, the prospect seems hopeless (as does the prospect for the survival of the world); but then, Socrates died and Jesus was crucified as a small-time crook.

Have faith, George.

Amen.

3: Independence run rampant

Appendix A

The Argument of the Book

Part One: Modes of Being

Section 1: Knowledge and Facts

[1][9] The book is a modern-day Scholasticism of sorts. [2] At present we are infected with the intellectual disease of "everyone has a right to his own opinion," which accuses those who call others mistaken of the moral fault of disrespect for other people. Facts are in disrepute.

[3] We start from the question of whether we can be absolutely certain of anything, and find, [4] that though Descartes did not answer the question, it cannot be doubted that there is something, because even the doubt is something. [5] Certainty is the knowledge that one is not mistaken, and there are various levels: absolute, when you know you cannot be mistaken, physical, when you have good evidence that you aren't mistaken, and moral, when you have no evidence that you are mistaken.

[6] Truth is absolute, because there are some things, such as that there is something, that cannot be false from any point of view; hence, truth as such does not depend on your point of view.

[7] Since there are truths that are absolutely certain, then it is certain that what is true cannot be false insofar as it is true; this, Principle of Contradiction, like the fact that there is something, cannot be proved and need not be; it is immediately evident. [8] Variations on this principle are the Principle of Identity and the Principle of the Excluded Middle.

[9] Facts don't depend on our knowing them; our knowledge depends on facts; there are no "facts for" someone.

[10] When we have knowledge, we have evidence of what the facts are.

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[9]These numbers refer to chapter numbers.

Opinions involve either insufficient evidence or evidence on both sides of the issue, with that on one side predominating. But not everything is a matter of opinion; it is not a matter of opinion that there is something.

[11] Consciousness is an act that is conscious of itself, that contains itself within itself. If this were not so, we could not be *absolutely* certain that there is something, and we are.

Section2: Causality and the Method

[1] With a starting-place, we need a method; and Descartes' won't work. The method here will be basically the scientific method. When we are confronted with evidence on both sides of a contradiction, we are curious, because we know that there are no real contradictions; hence, [2] the contradiction is not a contradiction but an *effect*. We know that our knowledge of the situation is incomplete; we are missing some fact. [3] The effect itself is nothing but the facts which contradict each other: an abstract aspect of the concrete situation which is called "what is affected."

[4] When confronted with an effect, we seek explanations: possible facts which, when added to the effect, would make the whole not a contradiction. First Rule: an explanation cannot leave any aspect of the effect unaccounted for. Speculation is the attempt to find explanations for an effect. Second Rule: any serious explanation must devise some way of ruling out alternative explanations as not actually facts.

[5] The cause is the true explanation: the one that actually does account for the effect. As such it is abstract: the fact and only the fact which accounts for the effect as such. The causer is the concrete object(s) containing the cause. Since effects without causes are actual contradictions (by definition), then it is immediately evident and absolutely certain that every effect has a cause (the Principle of Causality).

[6] Four theorems follow about effects and causes, defined thus abstractly: (I) The cause is outside the effect; (II) The cause is not altered or different in any way by its having an effect; (III) Identical effects have identical causes; (IV) Different effects have different causes. There are three corollaries to these theorems: (I) Identical causes have identical effects; (II) Different causes have different effects; and (III) Similar effects have analogous causes. [7] Analogy is the name given to similarity when the fact of two things being similar is known but not the respects in which they are similar. It is not the same as

metaphor.

[8] The causality of a cause is how it removes the contradictoriness of the effect; it is the relation of cause to effect, and is the same relation as being-affected: the relation of effect to cause. In general, what it is is not known from observing the effect; but that there is a relation is certain. [9] A condition is the cause of the cause (supposing the cause itself to be unintelligible—contradictory—by itself). It is not necessary to know the conditions in order to explain the effect, since the cause, even if not self-explanatory (i.e. not an effect) *is* a fact, and so is intelligible somehow.

[10] We will in this book find effects in consciousness and then define the cause operationally as "whatever accounts for this effect." The cause will have to contain all that is necessary to explain the effect; and we will use the theorems above to see if we can discover what must be the case in the cause or the effect in question remains a contradiction. We cannot know all about the world using effects and causes, because there probably are facts that do not appear as contradictions to us; and the cause in any case is only an abstract aspect of the causer, whose other properties cannot be known from the effect in question. So great care must be taken not to leap to conclusions.

Section 3: Finite consciousness

[1] I want to show how consciousness is an effect without a real world "out there," and then show how finite existence demands an infinite cause. [2] The evidence for some fact is a known effect whose cause is that fact. Evidence is the cause of our ***knowledge*** of the fact it is evidence for (which it is the effect of).

[3] The first effect in consciousness is that we are aware that we are not always conscious, even though it is impossible to be aware of being unconscious. The cause of this effect is that when we regain consciousness there are effects in our waking consciousness whose only rational explanation is the loss of our consciousness (e.g. "sudden changes" in clock readings). The alternative (that the world is fooling us) cannot be absolutely disproved, though it is insane to hold it; so we have left the world of absolute certainty here. But it implies that no sane person believes that only what he directly experiences is true.

[4] This fact that we are sometimes unconscious gives rise to the effect that one and the same consciousness is actually many separated

consciousnesses (i.e., our consciousness is not one but many streams of consciousness which begin and end; yet it is only one single consciousness). The mind is defined as "the cause which explains how multiplicity in consciousness can be one single consciousness." This gives us no clue to what it is in itself, however. The self is the causer of a unified multiplicity of consciousness; it may have many properties besides the mind. The mind exists during the unconscious periods between periods of consciousness (or it couldn't unify them). It is the same mind that exists between all the periods of the same interrupted consciousness. The mind is not the same as consciousness. There are different minds, a different one for each individual stream of consciousness. We are not "parts" of "one great mind," or we would "remember" others' consciousness as we remember yesterday's. My mind somehow excludes others' consciousness from my single stream of consciousness. What separates one consciousness into many streams of consciousness cannot be the mind (different effects have different causes), but some other cause (as, e.g., fatigue and refreshment).

[5] The second effect is that one single consciousness is different at different times. It is not just "conscious of different things," because that would mean that there are such things as unicorns; it means that consciousness takes on different forms at different times (the unicorn being just a form consciousness takes, not something it is conscious *of*). Not every form of consciousness is consciousness *of* something (other than itself); not all knowledge is "transcendent." If one and the same consciousness is different from itself at different times, then the first explanation would be that it has one aspect of itself which remains the same (i.e. as "my consciousness") and another by which this way of being conscious is unique (the "form" it has). But if the form is other than "my consciousness," then it is unconscious, and unknown. Hence, in order to be conscious in different ways, what is outside itself as consciousness (the form) is within it; or what is not itself is not different from itself. This simply restates the effect. The fact that I recognize that my consciousness takes different forms also implies that I am conscious now of being conscious in other ways than the way I am conscious now; or, my present consciousness contains by past consciousnesses within it as unconscious.

Another formulation is that my consciousness at the moment leaves out all of itself except this moment (form) of consciousness. The present moment is all there is to my consciousness, and yet it recognizes itself as not all there

is to my consciousness. The form, on this showing, is not a "something" which both is not and is consciousness (as if it were "added" to it, when the addition makes it less than itself), but simply a way of describing the fact that there is no more consciousness than this at the moment. The "way" is then absolutely nothing but my consciousness; but then my consciousness is not identical to my consciousness—and yet it is. My consciousness at any given moment is less than what it is for me to be conscious.

[6] The finite is that which is different from itself, or that which contains what is not itself within it as identical with itself, or that which leaves some of itself outside itself, or that which is less than what it is to be itself. [7] The form of consciousness, therefore, is not a little "picture" which consciousness looks at (Descartes' basic mistake); it *is* the limited way consciousness *is* at the moment. The form is nothing at all.

[8] There are other modes of the finiteness of consciousness than the form: Each stream of consciousness is only this one and not any other person's consciousness; each period of consciousness is only this period of consciousness (today's) and not yesterday's consciousness. These modes of finiteness are similar to each other as effects: they are all cases of consciousness's being less than consciousness (or containing what is not itself as identical with itself).

Any way of being conscious (any form of consciousness) is also identical with any other way as an effect: it is a case of consciousness's being less than itself in the sense of being (some) form of consciousness. The exact effect here is (1) my consciousness as "formed" is nothing but my consciousness; (2) my consciousness as "formed" is less than what it is for me to be conscious. Since this is an effect, Principle One can be said: any form of consciousness is impossible by itself; by itself it is a contradiction and cannot exist. It needs a cause *outside itself as effect* which "restricts" my consciousness (which can take on any form) to being just this way of being consciousness at the moment.

But this cause cannot be another way of being conscious, because then that way would be the cause of its own finiteness (since identical effects have identical causes); it cannot be a combination of different ways of being consciousness, because even a combination of an infinite number of different forms of consciousness would still exclude the way to be explained, and so would be less than what it is for me to be conscious. Note that what is infinite in one sense can be finite in another. Hence, the cause, whatever it is, cannot be within the stream of consciousness. The mind cannot be the cause of a

given way of being conscious, because different effects have different causes, and the mind accounts for how all the different consciousnesses are *the same,* and we need the cause for how *this* way of being conscious is *not* the same as that one. Hence, the cause of a definite form of consciousness is (a) outside consciousness and (b) outside the mind. Existence is the cause of a way of consciousness as "formed consciousness." Being is the causer of this effect.

Existence, therefore, is not any "formed consciousness," and is not the mind. Any way of my being conscious has as its cause both existence and my mind; my consciousness comes about as the result of an interaction between existence and my mind.

Section 4: Finite existence

[1] There are possible two types of mystical consciousness: that of the first moment, where the way of being conscious exhausts the consciousness (and so is not recognized as a "way")—and experiences analogous to this—in which consciousness is known as a fact, but not an effect (even though in fact it is finite); and that of a consciousness so full that it exhausts what it is to be conscious.

[2] But given that we have finite consciousness, it follows that there many different existences, one for each form of consciousness (there are repetitions of the same form of consciousness, obviously caused by the same existence).

[3] A new effect emerges when we consider the imaginary: (1) No definite way of consciousness is possible without consciousness + the mind + existence; but imaginary experiences recognize themselves as *not* the effect of some existence, but as spontaneous. Perceptions recognize themselves as reacting to something other than themselves (i.e. as effects of existence). The most reasonable explanation seems to be that when we react to existence, then this form of consciousness (or something that would cause a repetition of it) is stored somehow in the mind (and so taken out of consciousness); and so it (or parts of it) can be reawakened without the presence of the existence. We usually distinguish recalled (including recombined) past consciousnesses from reactions to existence by their level of vividness. Very vivid reawakened experiences are hallucinations when they are confused with reactions to existence. Chemicals can cause this.

[4] Hence, every form of consciousness as a case of consciousness as finite needs existence as its cause; every form of consciousness as a case of imagining

has the mind in its present state as its cause and existence as its condition. Every form of perceiving has a direct interaction of the mind with some existence as its cause. Real being is being as the causer or condition of a perception. Possible being deals with imagining, and is the fact that there is no contradiction is supposing that an image like this could be a perception. There is no such thing as possible being; it is a fact about consciousness. Therefore, we can say that we can only know that something exists if we recognize that, directly or indirectly, we are perceiving it.

[5] Repetitions of the same perception are caused by the same existence. Are different existences analogous? Only if the different forms of consciousness are similar as effects; and they are, because they are the special type of finiteness called the "form" of consciousness and not the "period". But since the effects are similar as effects, then their causes must be analogous; and therefore every existence is similar in some unknown way to every other, at the same time it is uniquely itself.

[6] Existence, then, is redefined as the cause of each "formed consciousness" as "formed consciousness," just like any other case of "formed consciousness." Essence is defined as the cause of each "formed consciousness" as *this* case and no other, and hence as different from any other "formed consciousness." But since the form as "this" and the form as "form" are absolutely identical in the effect (the form *is* the "thisness" of the consciousness), then in a given case, the essence which causes it to be "this" form of consciousness must be identical with the existence which causes it to be this "form" of consciousness. This means that essence is different from itself in each case, and is less than what it means to be "the cause of formed consciousness." Or in other words, essence is simply a name for the fact that existence is finite (in the case where its effect is a given finite form of consciousness). There is, then, both a real distinction and a real identity between essence and existence.

[7] But if existence is finite, then by Principle One it is not intelligible by itself, since it is less than itself. Hence, there is an *argumentum a pari* with the argument from the form of consciousness. The cause of finite existence cannot be another finite existence; the cause of finite existence cannot be any combination of finite existences, however large, even infinitely large; and therefore, the cause of finite existence must be other than finite existence.

There is the possibility that this cause might be something finite, as the cause of finite consciousness was (finite) existence. But since similar effects

have analogous causes, and what this cause (whatever it is) does to finite existence is the same as what finite existence as existence does to finite consciousness (it restricts it to being less than it "could" be), then it must analogously be existence. Hence, the cause must be a non-finite existence. Therefore, there is a non-finite existence: one which exhausts the intelligibility of what it means to exist.

God is defined philosophically as the non-finite existence. There can be only one God, because if there were two which were really different, then at least one would be finite; for the same reason, there can be no really distinct "parts" within the one God. God cannot be an effect in any real way of anything at all, because God can "contain" no unintelligibility, since all God is is existence, pure and unqualified. Everything but God is a finite existence; these cannot be contained "within" God, or God would have finiteness within him, which would make him finite.

[8] The proofs for God's existence which involve chains of causes do not in fact argue to anything infinite; and Kant is simply wrong when he says all proofs reduce to the ontological argument (which *is* invalid). Note that those who would deny the argument given for God's existence also logically would have to deny that there is anything but their own consciousness and mind.

[9] What accounts for there being different periods of consciousness are also finite existences (which we know through the effects on our consciousness); and the mind also is a finite existence (known as the cause of the fact that my consciousness is not yours); and the consciousness itself as aware of itself is recognized as a finite existence also. Anything we can react to (and consciousness somehow even reacts to itself) is recognized as existence. And therefore we can say that existence is activity: to be is to do. But existence need not be acting *on* a mind to be active (because the cause does not depend on the effect).

Based on this we can say that God is pure activity. It is also true that God is not the only cause of any finite existence, because different effects have different causes, and there are other effects in finite existences than the mere fact that they are less than their own intelligibility. But since every existence (every act) is finite, God is one of the causes of absolutely everything that is real or that happens; and no finite act can act without God's *actively* causing it to do so. God even causes me to sin, insofar as the sin is a finite act. God causes finite existences to exist as they actually exist, including their existence as effects of finite causes. Even self-determining acts (if any) are caused by

God to exist as finite self-determining acts. Cause in my sense does not necessarily determine; it makes sense out of. Further, God cannot delegate his causality to any other being, because that being would be a finite existence, and as such it is contradictory for it to be able to cause another as finite existence.

[10] The difficulty that one cause (God) who is simple and self-identical causes many different finite existences (though different effects necessarily have different causes) is possibly explainable on the grounds that there can be (as in the identity of consciousness and being-conscious-of-being-conscious) distinctions that are not separations into parts or into two interconnected acts (i.e. they "interpenetrate each other," so to speak). In this sense, God could be both one single act and also in a sense multiple; in which case there is no contradiction in his being the one cause of multiple beings.

Section 5: Truth and Goodness

[1] The epistemological problem is that if our only contact with existence is by the form of consciousness, and this is "infected" with subjectivity because it is actually the mind's act in response to existence, how can we ever know existence as it is in itself? Kant was wrong when he said we couldn't, because if not, we could not say that the sun really didn't change color as it approached the horizon; and we can.

Since my mind is different from everyone else's and makes my consciousness different from everyone else's, then the mind is the cause of the subjectivity of all forms of consciousness. The self, therefore, is the subject of consciousness, and the mind is that by which the self is the subject (the self is also the subject of my bodily acts).

[2] Since reacting to being as opposed to spontaneously acting is what distinguishes imaginary from real consciousness, then being is the object of consciousness. Being is either God or a finite existence or a unified combination of finite existences. We know that there are beings, since otherwise the multiplicity of forms of consciousness is impossible.

[3] The epistemological problem is illustrated by a man's sending a message in one language over the radio (in a code not different from Morse, translating it into signals, which are received by a computer (translating the signals as if they were Morse code into electrical impulses), which in turn are printed as letters. The message read and the reading, in this analogy, are

identical (consciousness is aware of itself and its form). The message received is not the same as that sent. But if (a) the same message is sent twice, then, absent interference, the letters printed out will be the same, and (b) if a different message is sent, different letters will be received. Hence, though we can never know what the original messages were, we can know the *relations* among them.

So the basic solution to the epistemological problem is that if the perceptions are the same, the beings causing them are the same (even though the beings are not the same as the perceptions); and in general, relations among perceptions will be paralleled by relations among the beings that caused them.

This supposes no interference with the transmission, however, which can happen (as sunglasses alter the apparent color of the being). When this happens, the relations between the effects are not the same as the relations between the beings.

[5] We correct mistakes, first, by asking others. A colorblind person discovers he is colorblind by asking others whether they see these two objects as the same color (as he does) and finding out that almost everyone sees them as different. He then concludes that his eyes are faulty, and they really are different. Sometimes, scientific instruments, which don't have faults that are common to all human beings, can help correct mistakes (and, e.g., show that light and heat are different in degree, not kind).

[6] A fact is a relationship between existences; and so what we objectively know is not the object, but facts about the object. Understanding is the act by which we know relationships among our perceptions or images, and if they are perceptions, therefore the relations among the objects that caused them. The judgment is the act of understanding as such. Now facts (such as similarity in redness) do not really *connect* objects, and so facts do not exist as such. Hence, the object of our knowledge is being, but the contents of our knowledge doesn't exist as such, though it has a foundation in the object.

[7] A judgment is true when the fact as understood is actually the fact about the objects; it is mistaken when the judgment of what the fact is differs from what the fact is. The fact is the standard for assessing the truth; the judgment must agree with it, and not the other way round. Truth is not internal consistency, nor matching of the perception with the object, but a matching of the relation understood with the way the objects are related. Hence, truth is basically objective, but involves the subject; but this

involvement does not make it partially subjective.

[8] Aspects are what it is about each object that allows it to be related to the other one; they are not of themselves existences, but are based on the indirect way in which we know objects: through their effects on us; they are the ways in which existences are analogous. The aspect both is not the existence yet is nothing but the existence; it is the existence as related to other existences (an instance of its finiteness). Plato reified aspects; he was wrong.

[9] We can, however, imagine situations that do not exist; and we can use these to compare with what we perceive. An ideal is a mental construct against which the facts are judged. Evaluation is the judgment of whether the facts conform to the ideal or not. In evaluation, the standard is the mental construct, to which the facts "ought" to conform. But since God's knowledge (if he has any) is his act of causing the finite being to exist (since he is only one act), then it follows that God has no ideals (because if he did, they would *be* the facts). Ideals are not discovered, they are constructed.

[10] The notion that something "ought" to be a certain way always comes from comparing the facts to a subjectively constructed ideal; and therefore, "ought" always has a subjective, not an objective, basis. An object is "good" when it conforms to my ideal of what it ought to be; an object or fact is "bad" when it does not conform to my ideal. Goodness and badness are basically subjective, even thought they refer to objects; the goodness itself, however, is not anything objective about the object at all. It follows from this that for God nothing is either good or bad; because goodness and badness exist only because of our indirect way of knowing, and therefore only from a human point of view. You cannot call "good" the end of a process and make sense of it as objective, because there are some processes which are reversible, and therefore, the beginning would be better than the end (as the end of the reverse process).

[11] Moral rightness and wrongness, however, have nothing to do with goodness and badness; they are the *fact* that the act in question is consistent with the agent performing it (morally right) or is basically inconsistent: a pretense that things are not what they really are (morally wrong). They are totally objective, and do not depend on anyone's standards—or even whether anyone knows of the inconsistency or not. A *choice* is moral if the person chooses to perform an act that he knows is right; the choice is immoral if the person knows or thinks that the act is wrong. Morality and immorality are objective in the sense truth is, because they depend on the facts as known; and

therefore can admit mistakes. But they are not evaluative, and are not subjective. Every act of God is morally right, because as infinite he cannot do anything inconsistent with his "limitations." And by the same token, since everything he chooses is something he can consistently do, every choice of God is moral. But this does not mean that either God or his acts are good, because we can set standards of "compassionateness" for God which he does not conform to.

[12] The problem of evil is supposed to be an argument against a good God; but evil "exists" in the world only because of the subjective standard of the human observer. Like cold, it "exists" relative to the observer, but is not something in the object at all. The privation theory of evil does not solve the problem, nor does evil as a punishment for sin. Evil can be eradicated by shifting your point of view and not expecting the reality to be different from what it is. Thus, if everyone became blind, then after several generations, no one would think it evil to be blind, any more than it is evil not to be able to fly by flapping one's arms. But since evil is not objective, there is no reason for saying that any evil will result in a greater good.

[13] The "transcendental properties of being," unity, truth, goodness, and beauty, *can* be talked about; but what they are basically is looking at existence from various points of view. Every object *is* good, for instance, if you expect it to be what it is; but this has no implication that the less limited the object, the better it is. These terms are not really useful.

Part Two: Modes of Energy

Section 1: Energy

[1] Exploring the various ways in which consciousness (and therefore existence) can be finite, we find that limitation of existence is not simple. First, an external sensation is the aspect of a perception which reacts to a single activity or aspect of an object. You can't actually have external sensations as such, but can only know them by comparing whole perceptions and understanding relations among their parts. Once you do this, you find that the form of existence is the analogy among existence by which they fall into groups of existences similar among themselves and different from others. The form, as a limitation of existence, *is* the existence as less than itself; it is a mode of the finiteness of existence. A mode of finiteness is something about the

finiteness of something by which it is analogous to only some other finite existences. Unfortunately, we will not be able to have things fall into neat categories of "species" and "genus" as Aristotle did. We can say, however, that a limitation is "formal" when numbers do not apply to it. Existence itself, of course, is not an aspect of existence; and this is the basis of the fallacy in the ontological argument. Since form is existence as finite, then God is not a form of existence; from which it follows that God cannot be perceived. If he caused an act of consciousness, it would be formless, and the act of consciousness which exhausted what it is to be conscious.

Many if not all forms of consciousness have numerous different examples of this form of consciousness; and therefore the forms of existence which cause them must also be limited. [2] Quantity is the mode of finiteness by which numbers apply to activities; and from this it follows that quantity is a limitation of a form of existence. Any measurable existence, therefore, is limited on two levels: form and quantity. The quantity is the "difference" *in* the form; it is not something "added" to it. In fact, it is a limitation of existence, which is all that is "there," and is (like form) in itself not anything at all. It *is* the existence as only this much of this form of existence. A spiritual activity is an activity which is not limited quantitatively; it is either God or a pure form of existence.

[3] Energy is any activity that is limited quantitatively. Energy always is some form of activity, and since it means essentially activity (existence), is an analogous term. But not all acts are energy, because not all acts are limited quantitatively, and an act is only energy if it is so limited. Hence, God is not energy, nor is his existence or activity energy. Energy is related to "work" in physics, because physics wants to find out what the quantity *is,* and so it makes it act on something until the energy is used up; work is just energy as the effect of some other energy. Force is causality as quantified (i.e. the relation between the cause and what is affected). It is related to a "tendency to change." The quantities of one form of energy will not apply to another form in a simple way, but only be analogous to them; which means that in physics a kind of mathematics must be done with the forms (the "units") in order to make the equations come out right.

[4] Fields are forms of energy which simultaneously possess an infinity of quantities, any one of which defines some definite aspect of the field. The field's potential is one of the quantities of its energy. [5] The real distance of one body to another is the force that that body's field is exerting on the other;

it is this that causes distance-as-perceived, but as Einstein showed, it is nothing like it. The abstract real distance is the causality assuming a "unit source" and a "unit affected object," or is the quantity due to the field as a field, irrespective of the strength of the source. The position of a body is its being-affected by some other body's field; this is the same relation as distance, only looked at the other way. Real position is actually the tendency to change based on the force and the objects tendency to respond to the force; abstract real position ignores differences in the source and the actual affected object. Objects can be in more than one real position at the same time; and an object can be in position with respect to some object which is not in position with respect to it, if it is not exerting a field-effect on this other object. This solves some conundrums in physics. Since, however, position involves quantity, then God is not in any position. The space around an object is its field; space taken absolutely is the sum of all positions, and is finite, and obviously is not itself anywhere. The place of a body is its positions with respect to the other bodies around it (i.e. how strongly it is affected by their fields). Angle is the combined distances of many objects to a given object (i.e. the combined causalities on that object, or the "resultant force" on it). Action at a distance is not only not impossible, action by fields *establishes* distance.

Section 2: Bodies

[1] Up to this point, we have been asking how one (existence) can be many; now we ask how many can be one. This is the "substance and accident" controversy, which has been misinterpreted in many ways throughout history. Kant's explanation, that the unification is purely subjective, doesn't work, because in that case, we could attach properties of one object to those of another, and something other than my subjectivity makes the set of properties inseparable from each other and separated from the set which is another object.

[2] And so our perceptions are in fact perceptions of many distinct objects, each of which is both many different acts and some kind of unification of these acts, such that a given set "belongs to" only one object. This is the effect. A set is a multiplicity that is experienced as or considered as a unit; a system is a multiplicity that acts in some way as a unit. Sets (as e.g. all red objects) can be known to have no real interconnection among the members (i.e. activity uniting them); systems have interactions among the elements. A

body is a system whose unity predominates over its multiplicity. A part is one of the multiplicity. A system is a body if its behavior as a unit is significantly different from the behavior of its parts. Since systems and bodies are multiple units, God is not a system nor a body. What a part of a body is depends on how primitive you want to be; it can be an act or a subsystem of interconnected acts. The "material fallacy" is the fallacy of saying that what the body is is primarily the parts (the material) it is made of; but what makes the body what it is is its unification, not the parts. The body needs parts, but a given body (as in living bodies) is the same body even as though it constantly replaces its parts. But since the unifying energy of the body is the interaction of its parts, it follows that a body acts as a whole only in and through its parts. And since there are different kinds of bodies, the form of the unifying activity defines the kind of body which the body is; from which it follows that the human embryo is a human body, neither a part of the mother, nor a body in a pre-human state. But since the unifying energy simply is the interaction of the parts among themselves, and this interaction excludes other bodies from being parts of the body, it follows that the unifying energy is not observable from outside the body. Since there are many instances of the same kind of body, then the unifying activity of a body is a form of energy (with a quantity).

[3] This quantity of the unifying energy is what was referred to by Aristotle and the Scholastics as "matter"; and the form of the unifying energy was the "substantial form" of the body. The quantity of the unifying energy is related to the total quantity of all the energies that make up the body. This accounts for the "conservation of matter" in changes. It is the quantity of the unifying energy that accounts for there being many different bodies of the same kind; therefore, it is exactly false that "all men are created equal." We are all qualitatively the same, but each human being has his own unique degree of humanity.

[4] The unifying energy is simultaneously one energy unifying all the parts, and (from the point of view of one part) a kind of "behavior" of each part by which it connects itself with all the others, or is a kind of "set" of internal forces. Thus a body is another mode of finiteness, because its unity is in its multiplicity, and vice versa. A property is a way the body acts as a whole; i.e. as these parts with this unifying energy. The property is an act, or a "behavior" of the body as such (even the properties such as color which we think of as static); it would be different with different parts or a different

unifying energy, and so depends on both. A substance is a kind of body. A property of a substance is an act of the body because it is the kind of body which it is; a property of a body is an act it performs because it is the individual body which it is. There are no "accidents," really, because the properties do not just "happen"; they are determined by the structure of the body (either as a type of body or as an individual, responding to the environment, for example). Properties of bodies are always acts, and in fact forms of activity; properties of inanimate bodies are always forms of energy. [5] An inanimate body is a body in which the quantity of the unifying energy has a determining role in what it is. Properties reveal what the body is. The nature of the body is the body insofar as it performs or can perform a property. The properties reveal, but do not exhaust, the reality of the body, because there are the parts and their unification, which are not properties. An intrinsic property is a behavior of the body as not reacting to some activity acting on it; a reactive property is a behavior in reaction to some action on the body. The size of a body is the distance between the outermost parts; its shape is its internal field with the parts in position in that field. The mass of a body is the property of the body by which it acts gravitationally (it is not its matter or "stuffness"). Since God is not a body, God has no size, shape, or mass, nor any property strictly so called.

Inanimate bodies have as their natural state the lowest energy-level compatible with the form of the unifying energy. They are thus subject to the second law of thermodynamics, which amounts to saying that instability in an inanimate body always means an excess of total energy. An inanimate body performs at any given moment all the properties it can perform at that moment; and what an inanimate body will do is predictable based on the total energy in the body at the moment.

Section 3: Change

[1] A change is an act by which one and the same thing becomes different from itself. It must be both one and the same and different for a change to occur; change is not replacement. [2] God cannot change at all, because as simple he cannot be different from himself in one respect and the same in another; therefore, he cannot be in process. Theoretically, God could choose to go out of existence (which would not be a change, strictly speaking), which would immediately annihilate everything; but since this choice would be

self-contradictory, we don't need to worry about it. Not every act is a change, as interactions in equilibrium in the material world show. Further, a finite spirit cannot change, because there is nothing about it except its form of existence, and so nothing that could establish its sameness with the being that existed in a different way before. It could be annihilated and another spirit created, but this would not be a change of one into the other. Change, therefore, requires energy, or can only exist in bodies.

[3] For something to change, it must be unstable. A body is in equilibrium if its unifying energy has the quantity it can exist with. The supposition here is that a body's unifying energy "needs" a certain degree in order to exist. If it has it, then it is in its natural condition, and will stay that way if left to itself. This condition of equilibrium is an *act,* however, and may appear as a repetitive cycle; but the body is in equilibrium in such an act if no energy is gained or lost from it over time. Instability is the condition in which the unifying energy has a quantity it cannot exist with (it is too energetic or too weak to exist in this form). Instability is not a state, since as a contradiction it cannot exist; and so the body ceases to be unstable (to this degree) as soon as it is unstable. This getting rid of instability is change.

[4] The direction of every change is always and only from instability to equilibrium. Reversible processes only mean that the resulting equilibrium can be made unstable in such a way that the new change is directed toward the original equilibrium. Direction means the change insofar as it is going from instability to equilibrium; it is its "towardness." Purpose is the equilibrium that a change is directed towards. It follows that every change has a purpose, and equilibrium has no purpose. Equilibrium is intelligible in itself, and so "needs" no purpose. Hence, not everything has a purpose. Any instability in an inanimate body has to have been introduced from outside (since it involves too much energy). This is the change's efficient cause (which must not be confused with the efficient causer). A substantial change is a change in which the body's purpose is a different kind of body; an accidental change is a change in which the body, though different, is still the same kind of body. The body in an accidental change gets rid of the excess energy (or acquires the amount it needs); if it can't cope with the excess and get rid of it, it is restructured to a body or bodies which can deal with the new energy level.

[5] Process is the act by which an unstable body regains its equilibrium; it is change as a property of some body. All processes have a definite purpose, and processes are the only acts that have a purpose. Purely spiritual beings do

not undergo process. Processes have two quantities: the length (the difference in energy level between the initial instability and the purpose) and the velocity (the quantity of the process as an act); the path of the process is the process considered as a number of processes added together. But the process is one act, not a series, and Zeno's paradoxes come from confusing the process as an act with its path. The notion of the "limit" does not solve Zeno's paradox, but merely defines it.

[6] Timing involves comparing the quantities involved in two processes. The time of a single process is the ratio between its length and its velocity; time as what measures processes is the length of a process with a standard, constant velocity used to measure the time (in the previous sense) of another process. Since neither quantity of a process depends on the other, then time is not real, any more than the sameness among all red object is a reality. Clock-time as an independent variable in physics is a historical accident, which only complicates the equations. Velocity can be measured directly, without the use of clocks, as in speedometers; hence it is possible to use energy, force, and velocity as the fundamentals in physics, rather than mass, length, and time; and if this were done, this theory predicts that the result would be a simpler and more elegant physics. But since time is a relation between quantities and God has no quantity, it follows that God is not in time; he is eternal (timeless) and so are his acts, though the material beings which are the effects of his acts are in time. For God, there is no past, no future, and no present; time words mean nothing applied to him.

[7] Movement is the most obvious case of process, though as newton defined "constant motion," he held that it was equilibrium, not a process at all. But his view cannot be sustained, because there is no way to establish position without fields, and no way to establish movement without changes in the effects of fields on the object; and therefore, movement always does involve a process and hence a purpose of equilibrium, at which the movement ceases. This is true not only of the movements of the heavenly bodies, but of evolution, unless the mass of the universe is such that it is cyclic, in which case it is one phase of an act in equilibrium.

Part Three: Modes of Life

Section 1: Life

[1] We can say that a being is a higher kind of being than another if it can

do all that the other can do and in addition acts that the other cannot do. On this showing, living bodies are higher kinds of beings than inanimate ones, because they have acts that the inanimate ones don't have, implying lesser limitation. [2] Nutrition takes energy and other bodies into the body, integrating the energy and parts into the body. The body actively seeks energy it seems to "need." On the other hand, every act it performs gives up energy. The living body by nutrition keeps itself at a high (and physically unstable) energy level. Biological equilibrium is an energy-level above ground-state equilibrium which the living body maintains by nutrition. Therefore, from the point of view of the physics and chemistry of the body, a living body maintains itself in an unnatural condition. Since the parts are the same in the living body and the corpse, this biological equilibrium is maintained by the unifying energy. Life is not really a constant process; once maturity is reached, life's tendency is to stay the same. Further, a living body is not always doing all that it can do at any given moment; it has energy kept in reserve; and therefore, if it is not doing some particular act, it does not follow that it cannot do it (even at the moment). Thus, the properties of the moment do not reveal the total nature.

[3] Growth is the process by which the living body goes from its initial instability toward its biological equilibrium (mature state). Biological equilibrium is reached when all the acts given in the genetic potential of the organism can be performed. The genetic structure of the body is not its life, nor is it its unifying energy; it determines the unifying energy as a kind of pattern, but is not the same as it (because corpses have cells with the same genetic structure, and are not living). Growth as a process goes from a lower energy-state to a higher; and therefore the purpose (biological equilibrium) cannot be determined by the quantity of its unifying energy (because it has less than this quantity initially). This means that the control of the living body comes from the form of its unifying energy rather than its quantity, as in inanimate bodies. Seeds and larvae show that a given genetic structure can determine different kinds (forms) of living bodies, implying different forms of unifying energy (though with common parts). But if an organism is growing toward its mature state, the form of its unifying energy is the same as the form it has in its mature state, because the direction the process takes is from the form of its unifying energy. Thus, the human embryo or fetus, which has no equilibrium intermediate (like a seed) between it and adulthood, has the human form of unifying energy, and so is a human being.

[4] Living bodies also take active steps to prevent interference from the environment. First, they rebuild parts that have been destroyed or wear out if they have mechanisms to do so.

[5] Secondly, they have defense mechanisms against possible attacks and mechanisms by which they attract organisms that can perform for them some task which they cannot do themselves. This happens because of chance interference with the genetic structure, though there has been really no laboratory confirmation of new species' arising because of genetic interference. Tiny changes in organs will not account for adaptive evolution, since some organs are very complex and useless until intact; and also genes work in clusters, not alone. The most reasonable hypothesis is that Divine Providence uses the chance interference with the genes to develop bodies with new characteristics.

The sex cells of an organism live a life inferior to the organism itself; but disturbance of the ovum results in a life superior to the ovum. God must therefore have a hand in every conception of every form of life. But if God is directing the chance element of things, then (since evolution runs counter to the tendency of the Second Law of Thermodynamics) this means that he must in some sense be aware of what is happening in the world. But since he is dealing with the chance aspect, his active intervention respects the reality of his creatures.

Population reaches an equilibrium for each species and does not continue indefinitely; in a stable environment, changes in species would also stop once each species became best adapted.

[6] Reproduction is very mysterious; the organism itself does not benefit from it, and only the form of the unifying energy continues limited to a new degree; but a form is an abstraction by itself. This implies that the form of unifying energy of a living body has a certain independence of its own quantity, as well as a sort of independence of the body it is organizing. Biological species hint at the form of the unifying energy but don't point directly to it, because larvae and adult insects are the same species, though the bodies are obviously organized differently. Sexual reproduction, though it mixes genes, is not *a priori* the most efficient way to reproduce. Hence, reproduction indicates that there is a certain superfluity in living bodies; not everything about them is necessary. This is an indication of "giftedness" from God, who creates the universe out of perfect love, since he makes it greater than it would otherwise be (it would be nothing) and he has no gain or loss

or alteration from doing so. Therefore, evolution should manifest more greatly his love for the world, and should also reflect love more as it proceeds.

[7] Life is the activity of a living body as living; so "to live" is "to do" or "to be," for a living body. It is biological equilibrium. It is existence insofar as it is in control of itself; and this implies that it is not under the control of its quantity. The higher one goes in life, the greater control is manifested, and also the "escape" from the domination by quantity or even from quantity itself. God is absolute life.

Life is essentially activity in equilibrium, not process, though its equilibrium involves processes. Therefore, life has no purpose as such; it simply is. The purpose of any organism is its biological equilibrium.

[8] The soul is the form of the unifying energy of a living body; the way it is organized. But since the body is living, it is a form of energy not dominated by its quantity. It is the kind of life the body has.

[9] A faculty is a part of the body organized with a sub-unifying energy such that its instabilities and recovery from them provide the living body with its properties and allow it to control them. The living body controls its properties by using some of its excess internal energy to make a faculty unstable. God and spirits have no faculties, because faculties are parts of the body. The acts of pure spirits are always "on" and cannot be turned on and off. A faculty is like a feedback mechanism, except that it needs no energy from outside the body; the unifying energy redistributes the energy it has.

Section 2: Consciousness and Sensation

[1] Animals have acts that lower forms of life do not have; therefore they are greater. It turns out that they are also less limited by quantity, as can be seen from sensation.

It is a misuse of the word "conscious" if the being is not also conscious of its act of "consciousness"; if it is not, the act is a simple reaction. We cannot be certain that animals are conscious, but we know we are, even on the sense level, and their organs are enough like ours to make it likely.

[2] Consciousness and being-conscious-of-being-conscious cannot involve two acts, because (1a) we could not be absolutely certain of the contents of a conscious act, and we are. (1b) We know all about the conscious act, how clear it is, etc. This precludes there being two acts, one of which activates the other, because the second would not know what the first was. (2) If there

were another act, this would lead to an infinite regress, since this second act is conscious. (3) The awareness of the conscious act is also aware of its relation to the conscious act. (4) The awareness of the conscious act must also know whether it is spontaneous or an effect of outside energy. (5) The awareness of the conscious act is what makes the conscious act conscious, not the other way round. (6) Any time lag between the "two acts" would involve a contradiction (being conscious without being aware of being conscious).

An act of consciousness is an act that contains the whole of itself within itself, or which reacts directly (not by means of a feedback mechanism) to itself. We do not see ourselves seeing, because seeing is a form of consciousness, a limitation, and it is the act which "duplicates" itself. This is called "complete reflection" or "self transparency."

[3] The conscious act cannot be a form of energy, for two reasons. (1) Insofar as it is energy, it involves a quantity beyond which it does not exist; but in order to contain the whole of itself within itself as only one part of itself, it would have to double the quantity which it has without getting energy from outside. A feedback will not work here. (2) If it were energy, it would be detectable by a drop in the electrical output of the nerves involved as the threshold of perception is reached and exceeded; but no such drop has been observed. Therefore, consciousness is a spiritual act, not limited in quantity as energy is.

If this is so, then the faculty of consciousness (the nervous system) must be organized with a basically spiritual act; and the soul of any conscious body must be basically spiritual. Computers, therefore, are not conscious.

[4] Sensation as consciousness must be spiritual; but it also must be a form of energy, because a pure spirit cannot change and sensations do; a pure spirit cannot react to anything outside itself, and sensations do; sensations also vary in vividness. Sensation is an act of consciousness which is spiritual, but in one or more of its "reduplications" of itself it does so as one or more forms of energy, the electro-chemical acts of the nerves in the brain.

This is not a contradiction because, though a pure form of energy cannot reduplicate itself (because it cannot increase its quantity) a self-reduplicating act can reduplicate itself to a limited degree; and thus the spiritual act "attaches" to itself a form of energy or "empties itself" into a form of energy while still being infinitely greater than a quantified act. The energy-output of the nerves in the brain are all really spiritual acts with an energy-"reduplication." The act of sensation is actually one polymorphous act,

containing in one act many forms of activity and a system of energy-outputs in the brain. The apparent vividness of a sensation is a special form of consciousness that reports the energy level; it is not itself a form of energy.

An immaterial act is in itself spiritual but cannot act unless it also "reduplicates" itself as energy. This is why it has the "conditions of matter." The faculty of a conscious body which never performs more than immaterial acts must be organized with an immaterial act; and if the body never performs more than immaterial acts, its soul must be immaterial. Animals' souls are immaterial, absent evidence for spiritual acts. An immaterial act does not survive the death of the body, since it cannot act without energy.

An animal does not consciously control its actions; the consciousness is merely an epiphenomenon of the energy-"dimension" of the act. Animals cannot know relationships as such because that needs spiritual activity.

[5] The sense faculty is the nervous system, and its major organ is the brain, where sensation actually takes place. There are five types of input into the brain: touch (involving contact with the nerves), taste (involving destruction of a body), smell (detecting the medium between the organism and a distant body), hearing (detecting the act of a distant body), and sight (detecting the distant body which is acting).

There are four basic processing functions of the brain, each with its own form of consciousness superimposed on the input. First, the integrating function (*sensus communis*) with its form of subjective space, uniting all the inputs into a perception (note that one cannot have a sensation which is not also a perception). Second, there is imagination, the storage and retrieval of perceptions or parts of perceptions. This generally occurs at a low level of vividness; if the image or sensation intrudes into what would normally be the vividness of its opposite, there is a hallucination or a *déjà vu*. Sleep erases the working area of the brain and also stores some images permanently. Dreams involve too much energy to be erased in one pass, and so energy is drained off by "running the brain forward" for a time and then erasing. Memory is the "dating" of images in terms of level of vividness; its form is the sense of subjective time.

The fourth processing function is instinct, the basic "program" of the brain, with its various drives which direct behavior on the basis of the input and the monitoring of the state of the body. This is not "instinct" in the psychologist's sense of the term, but tendencies toward behavior, which can be controlled consciously. The conscious aspect of this function is emotion.

There are no separate "sense appetites." This function directs energy-flow in the brain, and in so doing controls attention (what is above the threshold of perception) by borrowing energy from unimportant information and enhancing the important. It is also our drives, by which we automatically tend toward and away from certain things. Since instinct is under conscious control, in humans the way one feels does not reveal his true self.

Emotions of themselves are neither good nor bad; in humans they provide some information about the objects they respond to, but it is faulty; it is up to the person to see whether the object leads toward his freely chosen goals or not. Habits are consciously developed "programs"; they operate like drives, once acquired, but of themselves involve no emotional overtone. Drives and habits can become so strong as to be unable to be consciously controlled; when this happens (if they lead to undesired behavior) we have a psychological or emotional problem. A psychosis is lack of control over information; a neurosis lack of control over behavior. The goal of psychology should be to get a person back into control, not to "make him happy." All problems involving lack of control are emotional, and are not problems of "will," since the will, as spiritual (not immaterial) cannot be out of control of itself or "weak."

Section 3: Understanding and Choosing

[1] The burden of proof is on the person who wants to say that the human soul is spiritual, and that humans are not just complex animals. [2] Understanding, however, by which we know the meaning of words, cannot be an immaterial act. A word like "face" cannot refer to a mental act like a general image (a kind of "multiple exposure" of superimposed images), because then analogous senses like the "face of a cliff" could not be understood. It cannot be mere association, because when images are associated, they are complex, and we do not know by the association what the relation is among them; and understanding knows precisely this relation.

Understanding, then, is a distinct act by which we are conscious of the relationship is among parts of a given sensation. The meaning of a sentence or word is the act of understanding that it is calculated to awaken in the hearer's mind.

[3] Understanding cannot be immaterial because to know a relationship one must know the *termini,* the relationship itself, and the aspect in the

images (the termini) by which they are related in this way; and each of these presuppose that one knows the other two first. Thus, all three must be known in one act, which also knows itself knowing, and hence must be spiritual. Specific negative concepts could never be discovered if understanding were only a connecting (because what is understood is a definite disconnection). Computers, therefore, cannot understand, because their energy cannot double back on itself when it makes connections to see what the connection is in the very act of connecting, which is what is necessary for understanding.

[4] The sensation acts as a range within which understanding freely "picks out" a relationship with its aspects among its parts and ignores the rest of the image; the experience of puzzlement is the consciousness of understanding's selecting what relation to know in the image. The concept (the relation/aspect) is said to be "abstracted" from the image. Thus, understanding has no faculty as such; the conscious aspect of the sensation acts as its "switch." This implies that you cannot understand what you are not paying attention to, and so instinct can indirectly control understanding.

As understanding abstracts the concept, it simultaneously knows the sensation from which it took it, and whether this is externally caused or not; and it understands the concept as applicable beyond this sensation to anything with the same relation within it, or between any objects that cause the same relation. This full act of understanding is the judgment, of which the concept is an abstract aspect. Concepts are "universal" in that they apply to the infinity of possible objects that are related in this way.

Understanding then creates or finds a sensation that it uses to reawaken the concept; this is a word. Words are sensations that express any mental act. Words, as material, in expressing concepts express either the relation or the aspect and imply what is not expressed. They are also "concrete" if they express the concept as applicable or abstract if they express it in itself. Some words, however, merely point to objects; other words connect words. For economy's sake, words are kept to as few as possible consistent with communicating; and so grammatical systems of words occur. This is language. [5] The meaning of a linguistic expression is the mental act it stands for. Language is socially arbitrary, but not individually, because it is used in communication. The different mental acts expressed in language are statements (expressing relations or facts), questions, expressing a desire to be informed, exclamations, expressing emotional attitudes, and commands, expressing desires that someone perform an act.

Statements are true if they express what the fact in question is (whether they express the judgment correctly or not); if not, they are false. A lie is a deliberate attempt to communicate as a fact what one judges is not a fact.

Once we understand a concept, it becomes a permanent "dimension" of our spirit, but is not conscious unless a word or related image is conscious; thus we can turn our understanding on and off. Any animal which can use abstract language (not simply repeat or manipulate learned expressions) must be able to understand. It is extremely difficult to set up experiments to isolate this precise ability; so far, no animals have been found that can understand.

[6] An act is determined if it is not possible for it to be otherwise; an act is influenced if it is unlikely for it to be otherwise. An act is spontaneous if it is not determined from outside the body. A person is said to be free if he is not constrained by a threat; this sense of freedom is called "liberty." Freedom of choice means that the weight of the influences does not determine the choice. If "the good" is something objective and "the will" is automatically attracted to it, then to assert freedom of choice is a contradiction. But in fact the good is not objective; the choice itself creates the goodness, as seen in Section 5 of the first part.

Psychological determinists cannot explain consistently why we sometimes think we are free. The explanation is that this belief is an illusion based on ignorance of what is determining us. But (a) since the choice is conscious, it cannot be ignorant about itself. But (b) if this is the case, then compulsive behavior would not be possible, because the person would feel free if he did not know what was determining him, and he in fact discovers his compulsion by making a choice against what he finds himself compelled to do. This implies either that the choice is free or that there are overwhelming influences in opposite directions in the same person at the same time, which is absurd. Therefore, the choice is free, in the sense of self-determined. It also chooses the reasons for the choice, and how much weight they have. It is influenced only by what is conscious, and in fact only by facts understood at the time of the choice. If one chooses based on an emotion, he choose because of the fact that he has the emotion, and he chooses to consider that fact important. Hume is exactly wrong on this point. Emotions influence choices only by directing attention away from information, or by misrepresenting imaginary situations as facts. The choice itself is absolutely unlimited in scope; but our genetic limits do not allow us to carry out all our choices. The moral command, in fact, is that we limit our choices to acts which are in principle

possible for us. Finally, our acts are not in themselves free at all; they are "free" only when they are the acts we choose to perform, but they can also be determined directly by drives or habits in spite of the choice.

Choices are led up to when emotions or simple consideration lead one to imagine himself (or his world) as different from the way it is. This starts the process of deliberation, which involves weighing whether one wants that imaginary self as a goal or not; if one does, it becomes one's "true self" and an instability is set up in the body, leading to actions whose purpose is the chosen image of what the body is to be. Thus, the "good" becomes the "end."

We can, however, choose what is self-contradictory as a goal, and thereby be frustrated. This is the fundamental option underlying every choice. The motive for a choice is the goal chosen for the act; the act's motivation is anything that inclined the act in that direction. The two are rarely identical. Since instabilities have their own purposes, one must discover what instabilities will lead to the goal one has chosen. These means toward chosen goals are values. They are objective (because the object either has what will lead to the goal or it doesn't) but personal (because the goal is subjectively chosen).

Section 4: The Human Soul and Person

[1] The human soul is a spirit which by its nature has an energy-"dimension" which is not necessary for its existence. It must have an energy-"dimension" or it could not change and there could not be many human beings, since they are all of the same kind and therefore differ in degree of the unifying energy. [2] Therefore, its nature is to "reduplicate" itself as a form of energy; but since it can perform the act of understanding, which is spiritual and not material (has no energy at all), then it must be spiritual and not immaterial. Hence, the proper definition of the human being is "embodied spirit" rather than "rational animal."

[3] This does not prove that the human spirit ever does exist in a disembodied condition. Its spirituality merely argues that it is not impossible for it to do so, since it can act without energy. It cannot "go into" other bodies, however, because they would be the same body; and if there were any stage "between" them when it was purely spiritual, it would immediately be unable to change, forever, and so could not get into the next body. This also completely misinterprets the soul and its energy-"dimension." Reincarnation

has many other contradictions connected with it, and so it can be dismissed as expressing what the facts are.

But if the soul does not survive the death of the body, since it is its life, and the thrust of life is to stay alive if possible, it would be contradicting itself as life if it ceased to act at death, since it could do so. This characteristic is an effect which indicates that the soul does survive death.

Second, since the human has no built-in biological equilibrium, but the purpose of each human life is determined by the person's own choices, then (since each choice even when achieved has as its goal staying this way) this aspect of human living is completely contradicted if life ends with death. One then must set goals for oneself, while chance actually determines what one's life will be. Hence, in the life after death, legitimate goals must be able to be realized somehow. Happiness, knowledge of success (which is being what one has chosen to be) is not possible if life ends with death. Enjoyment (emotional satisfaction) may be, but not happiness.

Third, since in this life a person may be frustrated by circumstances beyond his control, it is often the case that he can avoid a greater frustration by choosing deliberately to violate his own reality; and thus the unreasonable act becomes more reasonable than the reasonable one. Morality, in other words, makes no sense unless life survives death in such a way that it is always to a person's disadvantage to frustrate himself deliberately by choosing a goal which is in some respect in principle impossible. [4] Therefore, the most reasonable conclusion is that conscious life will survive death; and once we die, we will be conscious with one eternal unchanging polymorphous act containing every conscious act we have ever made as a "dimension" of it, including all our choices. Our choices which have possible goals will be fulfilled, and all the self-frustrating choices will be eternally present, unable to be made unconscious; and hence if we have made immoral choices we will be eternally frustrated. The person after death will be exactly what he chose to be, no more and no less, including frustrations he deliberately chose rather than accepting his own limitations. Thus, we create our eternal selves.

We need not exercise all our natural talents, though they give us a "vocation" toward the life that would be most enjoyable. But there is nothing wrong in choosing a different one. Each of us differs from others because of the contents of this eternal act of consciousness.

Redemption, erasure of immoral choices, is not naturally possible. There is no philosophical evidence that God will do this for us, though Christianity,

which is beyond philosophy, indicates that he will, and philosophy can show that this is not a contradiction.

We are not only limited by our humanity, but by our race and sex, which are qualitative limitations below the basic human limitation; the individual limitations are the quantitative ones, and individual variation is much greater than sexual or racial variation, though these are a factor in some of our acts. Sexual and racial differences generally imply differences in approach rather than role or acts themselves.

[5] Human beings, as naturally embodied spirits ought not to have to die (and spend eternity in an unnatural condition), or grow old, or be out of control of their emotions (which after all are the same spirit as the choice). This unnaturalness about our nature as we observe it can be explained if the initial human being was given a choice as to what the human genetic structure would be like, within certain limits; and he chose to reject those limits. To show him that he was not master of himself totally, God made his nature as involving energy fight against and eventually escape from his nature as spirit; and this tendency was handed down to all of this person's descendants. Thus, human nature is fallen.

[6] A self is a being which possesses itself and makes itself be what it is; a person is a self as related (i.e. able to be affected by) other selves. As long as a human being exists (even as an embryo) it is a self and a person, because it is the kind of thing which is self-determining. Otherwise, we would lose our selfhood or personhood when we went to sleep or got knocked out. There may be other persons than human ones; certainly God is a self, though he cannot be affected by any person outside himself. It is inconsistent for a person to choose his own development in such a way that he interferes with another person's development; this violates the other's right. A human being cannot develop himself as a self without being a person, related to other selves; thus, we cannot survive without receiving some uncompensated service, and so cannot always demand compensation for everything we do for others. There are thus two distinct ways we have of relating to others: as self-determining, with rights, and as interdependent and cooperative.

If a person forms ideals and does not turn them into goals, they simply become sterile standards by which he can complain about the way the world is.

Part Four: Modes of Thought

Section 1: Mysticism

[1] Thought differs in the different avenues by which we get factual knowledge: mysticism, perceptual, and esthetic experiences, as well as the different forms of reasoning using the information we have. [2] There is a kind of consciousness that involves no concepts or reasoning, called "mysticism." It is of two types: empty consciousness, and absolute consciousness. There are also other "altered states of consciousness" like hypnotism.

Empty consciousness is the intellectual counterpart of opening one's eyes in perfect darkness, where one sees nothing (the form of blackness is the form of consciousness of there being no energy entering the eyes). If one deliberately refuses to think of any relationship, then the spirit is intellectually active, but there is nothing to understand, and so it understands itself as understanding nothingness, but not as such (because that would be a relationship—"not something"—and a concept). It is a very mysterious condition, and seems to be understanding everything that all is one and that being and nothing are the same, that the subject is the object, and so on; because none of these things are distinguished, and all there is is undifferentiated awareness. This is the goal of many eastern religions, because it seems very profound; but it is actually totally empty and is only the awareness-of-awareness with nothing to be aware of.

Falling in love, in addition to an esthetic aspect of understanding through the emotions, has something of this empty consciousness about it, insofar as the mind concentrates on the uniqueness of the beloved (but not as such). One seems to "know everything" about her or in her. But one actually knows nothing by this act.

[3] LSD, peyote, and other psychedelic drugs raise the level of imaginary experiences to that of perceptions or even beyond; but since the chemically-produced energy is so great, the sequence of hallucinations is more random than dreams. They can cause psychoses because repetitions of the experiences can be triggered again, creating confusion between the real and the imaginary.

We can allow other people to take control over our instinct in the circumstances of hypnosis, which in many ways is like dreaming. The other person has more control over instinct than we consciously do ourselves. Possession, if it actually occurs, is essentially the same as hypnosis, but by a

pure spirit.

[4] Absolute consciousness is the mystical experience of God or being without limit. It is not conceptual, and so is indescribable (as empty consciousness also is). It often goes along with ordinary consciousness as a kind of "taste" for the truth. Since it is non-conceptual, the mystic often thinks that his prayer is poor or distracted, and has doubts even about his faith.

Section 2: Formal logic

[1] Logic is the way sensitive expressions of acts of understanding go together to form new relationships which can then be understood. Each discipline has its own logic. [2] Formal logic is the logic of statements, and it exploits the fact that most nouns both point to images (or image classes) and have meaning (express the relation among the images and the aspect). Formal logic is the arrangement of statements in such a way that the final statement cannot be denied without contradicting what has already been said.

Logic is not interested in the truth of the statements; they are mere propositions, stated "for the sake of the argument." Propositions, therefore, are affirmed (accepted) or denied (rejected), not called true or false. In order to be a proposition, a locution has to be meaningful; it cannot be meaningful if it refers, either directly or indirectly, to its own truth or falsity.

[3] A term is a word or word-group used as a noun. The subject of a proposition is the term that refers to a class of objects; the predicate is the term that expresses the meaning. the copula is the present indicative of "to be" used as a "link" between subject and predicate. The same word can be different terms, depending on the class of objects it refers to in the context of its use. Terms are definite if the objects referred to can in principle be designated (*every* is its sign). Terms are indefinite if the objects are known only in relation to the class they belong to (*at least one* is the sign). The subject of a proposition must be accompanied by its sign. For logical purposes, it is assumed that classes referred to are not empty. The proposition is affirmative or negative depending on its copula. The predicate, expressing meaning, has no actual reference, but it has a potential one: If the proposition is affirmative, the predicate is indefinite; if it is negative, the predicate is definite. Definite propositions are not covert hypothetical propositions; asserting they are such would make it logically impossible ever to state a definite proposition as true.

[4] Propositions can be converted by leaving the copula alone and interchanging subject and predicate, as long as no term goes from indefinite to definite. Propositions can be obverted by changing the copula and adding a negative to the predicate, canceling out double negatives.

[5] Syllogisms are inferences with two premises. If whole propositions are combined, they need be put in no special form. The inferential mode of reasoning affirms the compound and affirms or denies one of its components, and concludes to the other; the refutational mode affirms or denies each component and concludes to the compound. The logical function of a connective is the indication of what is to be done with the statements; the meaning of the connective is how the facts stated are interrelated. Contemporary symbolic logic thinks that the meaning of a connective is nothing but its logical function; this is false, and results in contemporary logic's inability to apply to actual reasoning using statements.

"And" means that there is some relation between the facts connected. Thus, simply affirming each component does not conclude necessarily to a true compound. "Is incompatible with" ("not both") means that the two components are not compatible with each other; at least one must be denied. This allows certain inferences. "And/or" (the weak "or") means that the possibilities referred to are connected in such a way that at least one is realized; this also allows inferences. "Either/or" means that the facts referred to contradict each other; this is the "disjunctive syllogism." "If then" means that the consequent depends somehow on the antecedent.

Material implication is an erroneous view of "if then," saying only that it is not the case that the antecedent is true and the consequent false. "Implies" in this form of logic is compatible with the absolute independence of the components from each other; the "implication" is just a negative proposition. This approach confuses the logic of statements with the logic of mathematics, and the two are not the same.

[6] The four propositions with a given subject and predicate are related to each other in all the above ways except "and"; this is called the "square of opposition."

[7] Categorical syllogisms make use of the fact that sometimes the relation of predication is transitive; their rules show the times when the relation is in fact transitive. The rule of substitution, that predicates of parts can be substituted in their indefinite form for the term which expresses the part, allows Aristotelian logic to handle with greater ease some inferences that could

hitherto be done only with contemporary logic.

Section 3: Mathematics

[1] Mathematics is not a subset of formal logic (nor vice versa); it has its own logic, which is different from the logic of propositions. [2]Modern mathematics has also got itself into some difficulties. Mathematics is the science of relationships and the related as such. Mathematics starts with a relationship, then creates (defines) "objects" whose sole meaning is to be the object of this particular relationship. It then asserts a set of basic facts about these "objects" based on the relationship; these are the "axioms." Then mathematics draws out the logical implications of the facts; these are its "theorems." One reason why formal logic does not work as a mathematical system is that statements have meaning as well as truth, and the two cannot be divorced from each other; but mathematics does not have this problem.

[3] Mathematical systems are interested in "closure" and "completeness." A system is closed when any legitimate operation will keep you still inside the system; and it is complete when any statement in the system follows somehow from the axioms. Gödel showed that any complex system will always be incomplete; still, systems try to be as complete as possible. The calculus is not really a question of limits; it is the fact under certain circumstances, the fraction 0/0 can have a meaning. Many of the mysterious "paradoxes" about infinite sets are resolved by noting that they are based on an equivocation of "all": "all" as meaning "every" (its distributive sense), and the inclusive sense of "all." Infinite sets by definition (a) need the inclusive sense of all, and make this sense meaningless.

Section 4: Science

[1] Scientific method actually uses the notions of effect and cause described in the first part. [2] Scientific curiosity is aroused when the scientist thinks he has evidence that a contradiction has occurred. He then makes a careful observation to ascertain just what aspects of the situation are the effect (to separate it from what is affected). Mathematics can make this easy, because some effects involve the quantities of the objects, and mathematics can be worked backwards, allowing greater indications of what the cause is.

The hypothesis is an explanation of the effect in question; its logic is that of "if then." There are no rules for getting from observation to hypothesis; it

is often the work of genius, reorganizing the data in an unexpected way. Induction is something different from this; it is a logical inference which seems to violate the rule of passing from indefinite to definite. It cannot be explained as arbitrary or as an instance of probability (because the inductions we are surest of have very low probabilities). It is actually a scientific process; the scientist observes enough instances to think that the constant behavior is not chance; he then hypothesizes that the (constant) structure of the object is producing the behavior, and experiments to find some part of the structure which would logically be expected to result in the behavior; and when he finds it he concludes that all instances of this object, having this structure, will behave in the way in question. He has found the nature of the object.

[3] Experiment is the initial test of whether the hypothesis expresses the cause. The hypothesized cause must account for all the observed facts about the effect.

Probability seems to be laws of the random; but this is a contradiction, and yet the laws work. A thought experiment shows that in order for the laws to work, there has to be something constant underlying activity that is in other respects random; and so the theory is that if something behaves in random fashion but has something constant constraining the behavior, the constant structure will show up through the otherwise random operations. This is not a logical necessity, but it turns out to be empirically verified, as the "law of averages" is not. Statistics is probability worked backwards; apparent probability relations sometimes are due to a constant underlying factor constraining the operations (though sometimes they are just chance).

[4] A hypothesis which has passed the test of experiment is a theory; and a theory is to be accepted as fact, absent evidence to the contrary. A good theory is simple, meaning that it assumes few facts not in evidence (because many unrelated facts would mean that chance is the "explanation," and chance explains nothing); it is logical, meaning that the data in question follow logically from the cause expressed in the theory; and it is comprehensive, meaning that all aspects of the effect (even those hitherto unobserved) must follow from the theory. Theories predict because one can almost always draw logical conclusions that have not yet been observed as facts; and these conclusions must be facts if the theory is true. In this way, theories can be falsified.

Models are analogies, not metaphors. By studying aspects of the model, one can actually learn things about the unobservable objects. Laws are

statements of invariant relationships. Theories that are "verified" do not really become laws; theories are explanations.

Section 5: Beauty and Art

[1] Perceptive understanding uses perceptions and/or images as the termini of the relationships it understands; esthetic understanding uses emotions as the termini of the relationships understood. A perceptive fact is understood by perceptive understanding; and esthetic fact by esthetic understanding.

[2] Emotions monitor the state of the body and connect it with the information coming in through the sense organs, indicating behavior. They are not an expression of the noumenal "will." You can stop the emotion from causing behavior, however, and contemplate it in relation to the object which caused it. This is the basis of esthetic understanding. Pornography fails as art because the arousal is so great that it is looked at in terms of behavior not of the cause of the emotion.

The subjectivity connected with the monitoring of the bodily state can be circumvented if (a) you have two different emotional reactions to different objects at the same time; this implies that the difference comes from the objects, not your state; (b) you have the same emotional reaction to the same object at different times; this implies that the sameness is due to the object; (c) many different people have the same emotional reaction to the same object. In these cases, relationships among the emotional reactions parallel relationship among the objects, and so a fact is known through the emotions, just as perceptive facts are known through the (subjective) perceptions. The objects then have the esthetic property by which they are capable of causing the emotion in question. But in all cases, esthetic understanding tells us as much about human nature (its emotions as "receiving instruments") as it does about the fact "out there."

[3] Esthetic facts cannot be restated as perceptive ones, any more than facts based on sight can be stated in terms of sound; but this does not make them any less facts. Kant's universal subjectivity does not recognize this relationship. Esthetic judgments have as their form an esthetic concept, which is in fact abstract, not concrete, leaving out everything except the relationship understood and its aspect in the object. Art is concrete because it has to awaken emotions, not because the truth it expresses is not abstract.

Esthetic concepts can be either simple or complex, depending on how many emotional overtones they interconnect; the complexity can be internal or external, depending on whether the object arouses emotions by itself or also because it refers to other emotionally charged objects. Esthetic concepts can be more or less clear, depending on whether they recognize the esthetic aspect in the object or not; perceptive ambiguity can be esthetically clear. Esthetic objects have to have unity, because we relate the parts, and anything left unrelated leaves us unable to understand the whole. Esthetic concepts can be more or less precise insofar as they leave out anything that is not relevant to the concept. There are general esthetic concepts as well as specific ones. Esthetic concepts can be more or less intense depending on the intensity of the emotion involved. Very intense esthetic concepts can be overpowering, because the emotion is reinforced by the intellectual experience of understanding a fact through it. This explains why tragedy works; Aristotle's "catharsis" is actually seeing esthetically the meaning of otherwise horrible (and therefore intensely experienced) events. There is also esthetic logic; the parts must be in a sequence where they follow each other the way the *emotions* demand, not as perceptive logic would have it. Art involves genius and rule-breaking insofar as understanding new concepts means seeing relationships that have not been noticed before; and this means organizing the data in emotionally new ways. Newness for the sake of difference does not work; what is understood must be recognizable as true, not just different. But not all art needs to break new ground; there are many esthetic implications in old stuff that have not be explored.

[4] Beauty is esthetic goodness; that is, an object is considered beautiful if the esthetic aspect it has is the one we *a priori* expect it to have. Ugliness is the lack of an expected esthetic property. Hence, like goodness, it is basically subjective, but has an objective pole.

There is, however, good and bad art, insofar as the esthetic statement made is true or false (whether mistakenly or deliberately), or actually expresses something in some way not yet understood or is trite—or finally if it mistakes evoking emotions for seeing relationships among them, in which case it is sentimental. Artistic inspiration is understanding a new esthetic relationship that one did not understand before; and like scientific curiosity, it must be worked up and expressed in such a way that the work of art will evoke the proper emotions in the proper sequence so that the concept can be understood by the normal observer. Usually in the process of doing this, the

original vague concept will be modified, just as is the case with expressing any perceptive idea that is at all complex. Art does not simply express an emotional relationship; like all sensitive expression of understanding, it also communicates it; and so the artist should have mercy on his audience and try to be clear.

The difference between art and rhetoric is analogous to the difference between science and engineering; rhetoric uses esthetically understood facts to lead people to action.

Section 6: Humor

[1] Humor is not, as some hold, nastiness with a smile. [2] Humor is the understanding that some fact about the world does not make sense, together with the refusal either to treat it as a problem or evaluate it. It simply accepts the absurd as a fact. Since the nonsensical event is a fact, then showing that this is so is communicating knowledge, and this is why comedians like to be laughed at; they are teaching something true.

Since humor involves the refusal to evaluate, then seeing some things as funny can involve tacit connivance in dehumanization; and therefore, "sick" humor can be immoral. [3] There are various types of humor based on the different types of incongruous juxtapositions there are. Satire is to humor what rhetoric is to art: it starts with understanding something as funny, and indicates that, if you look at it more closely, it is bad and to be corrected.

Section 7: values

[1] It is to be remembered that values are not the same as morals. [2]"Values" to be respected, like life or freedom are in fact rights, and they "supersede" other values in that no value can yield to them. They should not be called values, but rights. "Moral values" such as virtues ("values to be admired") are moral standards: acts which are objectively consistent with what it means to be human; they are not really useful for anything, but are simply standards for judging conduct. None of these things should be called values, because this tends to lump them with those aspects of things which are useful, and this causes confusion.

The value of any object or act is the aspect of it by which it can lead to a chosen goal. The goals are freely chosen, but the object either has the value

or not; you cannot choose it to have a value it doesn't have. You do not choose or develop a value system; you choose a set of goals, and these automatically carry with them the system of values implied.

One goal is more important than another if the other will be given up or postponed in order to achieve it. Importance is subjective; nothing is objectively important. Anything can be important if you choose to make it so. An object is more valuable than another if it leads to a more important goal; therefore, no object or act is objectively more valuable than any other object or act. From this it follows that it is morally wrong for one adult to force another to act in conformity with the forcer's value system, though children and incompetent adults must be forced to do so.

[3] An essential act is one without which a human being cannot be human, either absolutely (he dies) or relatively (he is dehumanized). An act is more essential if the dehumanization in not performing it is greater. Dehumanization means being forced to do less than what is implied in one's human genetic potential. A necessity is a means toward an essential act; an absolute necessity's lack implies death; a relative necessity is greater when the essential act it leads to is more essential.

In practice, a person is dehumanized if he cannot do what "practically everyone" (of those around him) can do; what "practically everyone" can do is understood as what a person could be expected to do just because he is human. The definition varies from culture to culture, because the "zero" at which dehumanization takes over is based on experience, and is not something absolute about human beings. One interesting thing is that it is essential for a human being as free that a certain number of non-essential options be available for him to choose among. Dehumanization is another name for harm or damage. The poverty level of a given culture is the level of financial resources such that the person does not have the minimum ability to choose that "practically everyone" in the culture does.

The relation between values and necessities is the following: (1) We have a right to be able to perform essential acts (and to necessities); we do not have a right to be able to achieve our goals (or to the values that lead to them). (2) A person may not morally choose to deprive himself of an essential act except to avoid depriving himself of something at least equally essential. But a person may give up any goal he wishes. Hence, necessities, no matter how small may never morally be given up to obtain values, no matter how valuable. (3) Essential acts and necessities are not in the same category as values and goals;

they are incommensurate. If one has a necessity, it is taken for granted (its "value" is zero), because it belongs to one in virtue of being human; if one lacks it, its "value" is infinite (greater than any value). Hence, necessities are not "very valuable" values, any more than blue is a very loud sound. (4) Values are related to the subjective goal of the person who has them; necessities are related to the objective humanity of the person.

Actions of a person can be of value to other people; hence, a person's "life" can be more or less valuable than another. But this has nothing to do with the value of the person as a person; persons are ends, and must never be treated as means.

[4] A potential value is some aspect of an object that leads to some human activity; potential values can be classified according to the different types of human activity there are, any one of which can be chosen as a goal in one's life.

Part Five: Modes of Conduct

Section 1: Morality

[1] It turns out to be necessary to discuss acting consistently with one's reality before spelling out some of the facets of that reality; that is why the modes of relating comes after this. [2] The moral problem is that everyone thinks that what is wrong (according to his own definition) is something that he must not do. Yet it may be clearly advantageous to do it. In fact, every person's notion what is wrong follows from his notion of what it is to be human; it is wrong if it is inconsistent with being human. This is true also of all ethical theories, even those which deny "objective morality." Conduct is behavior looked at from a moral point of view. Acts are morally right or wrong if objectively they are consistent or not with the reality of the agent. Choices are moral or immoral if they are choices to do what is known to be morally right, or to do what one thinks might in fact be morally wrong. Moral "goodness" or "badness" deal with the expectations of a person's behavior; one expects people to act consistently with themselves, and therefore, morally wrong acts are thought of as bad.

The moral imperative deals with what is forbidden, not what is "good." Each person thinks that what is forbidden for him is "really" forbidden for everyone. This prohibition is regarded as the most serious of all, and is

generally connected with some kind of divinity. Moral codes are not differences in values at all, but differences in the factual information a person possesses about what is reality is and what actions are inconsistent with it. Ethical questions are in fact able to be settled.

[3] This idea that immorality is forbidden cannot come from early training, as Freud held, or the things held to be most serious as adults would be things like not slamming the door, which we regard as trivial; cultures could not change their moral beliefs in a short time, and they do sometimes; we would recognize no distinction between feeling guilty and knowing we were immoral, and we do. Nor can this idea come from social pressure, because reformers would then be regarded as evil, and they aren't; cultures could not change their norms based on the wrongness of the present ones, but they do.

[4] Both of these "explanations" also leave aside the main problem: why should I do what I know is to my disadvantage just because it is inconsistent with myself? The only sensible answer is that there is an afterlife which will make me worse off for doing it; and we discussed how this occurs in Section 4 of the second part.

[5] A person, therefore, must never be willing to do what is morally wrong. Emotions and drives are not directly relevant to morality; it does not matter morally how you feel about something. But to the extent that emotions block out of consciousness information that would normally be accessible, to that extent choices based on this lack of information (or on emotionally created misinformation) are moral or not depending on the information we have at the moment, not on what is latent. If a person chooses to perform an act and a drive prevents him from doing so, his moral status depends on the choice, not the act. But a person makes an immoral choice if he deliberately gets into a situation where he foresees the drive will take over. If he is under the grip of the drive, he is only immoral if he is willing to be this way. Habits also function like drives; a good habit is a virtue; a bad habit, a vice. They are moral or immoral insofar as one is willing to be in the condition in which the habit determines the act.

Responsibility is the fact that the act and its consequences belong to the person insofar as his choice could have made them different. It applies only to what actually was done. Physical responsibility is the responsibility for an event because it was in principle possible to prevent it by choosing differently (even if the choice would have been immoral). Moral responsibility involves

knowledge of the act and its consequences and a choice based on this knowledge. Legal responsibility is an attribution of the event to the person if "the normal person" would have been morally responsible for it. A person is guilty when he has chosen to do what is morally wrong or illegal (whether the event occurs or not). He is legally guilty, however, only if he is responsible for the event (i.e. if it occurred).

[6] Conscience is the factual information one has at the time of the choice about whether the act is morally right or wrong. Since the choice and its eternal consequences depend on this knowledge, a person's conscience is always the final court of appeals on moral matters; but this does not mean that morality is based on opinion; it is the person's *factual* knowledge. Conscience has nothing to do with feelings, emotions, or values.

A clear conscience is no information that the act in question might be morally wrong. An unclear conscience is some evidence that the act might in fact be wrong, even if that evidence is weak. It is always moral to choose to do what your conscience is clear about, and always immoral to choose to do what your conscience is unclear about, irrespective of what the facts actually are. To clear an unclear conscience, (1) choose an alternative your conscience is clear about; or (2) find out the facts of the case are, if possible. In doing so, a reputable expert may be consulted, in which case you must follow his advice, absent any evidence of his ignorance or bias. If it is known that many experts disagree, this indicates that it is not humanly possible to learn that the act is wrong, and so the most lenient view (of *reputable* experts) may be followed. (3) If and only if neither (1) nor (2) can be accomplished, one must choose away from what seems more wrong, thus assuring oneself that one's will is in the right direction: away from wrongdoing.

[7] An act is always chosen in some situation, and aspects of the situation relate the act to the chooser's humanity, and so may alter the moral status of the act. This is not "situation ethics," because the situation does not create the reality of the agent. Any one of the aspects of the situation may do this; if any aspect makes it inconsistent, it is immoral to choose the (otherwise legitimate) act in that situation. Thus, a good goal (good intentions) do not make the choice moral if something else about the act is inconsistent; the end never justifies the means. If you choose an act, you are in general also choosing all of the effects you foresee will come from it; if any one of these is wrong, the choice is immoral, even if what is wrong is a side-effect and not your goal.

But one can keep side-effects out of the choice by using the five rules of the Principle of the Double Effect: (1) the act itself must have nothing wrong with it except some effect; (2) the act must also have a good effect; (3) the good effect (the goal) must not depend on the wrong effect; (4) no wrong effect may be a motive, even a secondary one; you must not want the wrong effect; and (5) the effect of not choosing the act and its effects must be worse than (or at least as bad as) choosing it. This last does not mean that the benefits of choosing the act outweigh the wrong effects, because the two are incommensurate; one must compare damages. Note that, no one has a moral obligation to do damage to oneself to avoid greater damage to others, even when the Double Effect permits it.

Section 2: Personal morality

[1] This Section deals with morally wrong acts in general, not with moral choices, or acts modified by particular situations. Everything said in the preceding Section is presupposed here.

[2] First, since humans are dependent on God's causal activity for every act they perform, they must never act as if they did not depend absolutely on God. They must not worship anything but the non-finite activity, or to try to manipulate God or bargain with him, or to refuse to worship him.

Since a human is an embodied spirit, it is morally wrong to act as if he is a spirit with a body "attached" to it or as if he were just a body, even one with spiritual "adjuncts." The material acts of the body are not objectively "worse" than the spiritual acts, and are not to be despised. But since instincts are controlled by the spirit, it is morally wrong to follow our emotions as if they indicated the direction of our "true nature." We must see to it that, as far as possible, our drives do not become strong enough to take over control from the choice.

Since the human body is a unit with faculties, it is morally wrong for a person to deprive himself, by removal or suppression of the act of a part, of an ability he has as human. The removal of the part puts him in the position of being unable to do what he is able to do. Parts of the body may be removed when the Double Effect applies; this also applies to donating parts to others, though no one ever has an obligation to donate a part to another, even if the other will die without it. Sterilization, in which the inability to become pregnant or to impregnate is the means toward the desired goal, is immoral

no matter what the goal is.

[3] Since a human body is a living body, it is immoral in general to choose an act which reason says might result in one's death; and if experts regard an act as dangerous to life, this is evidence that it is so; thus, smoking and taking other dangerous drugs like alcohol is morally wrong (except under the conditions in which experts say it is not a danger); it is also immoral to choose to drink and drive afterwards. But a person can choose a dangerous act when the Double Effect applies. It is immoral to refuse what sustains life; but if a person is dying, he may refuse to take steps to postpone the death, using the Double Effect.

It is morally wrong also to harm one's health, though acts which harm his health may be done using the Double Effect. A person is healthy when he can do all that is in his genetic potential. A person must morally do what is necessary to maintain his health, though not he is not obliged to keep himself perfectly fit, but only not impair his activities.

[4] Since faculties enable the body to turn its acts on and off, it is not morally wrong to refuse to exercise a faculty one has, unless the effect is some damage to the person. It is not morally wrong to use some artificial device to enable the faculty to perform its act better. It is not morally wrong to suppress the functioning of a faculty (even by artificial means) when this is the same as not exercising it. Nor is it morally wrong to use a part of the body for some other function than the act of the faculty it contains, provided the faculty is not damaged and its proper function is not suppressed. But it is morally wrong to suppress one of the functions of a multi-function faculty so that it can simultaneously be exercised for one of its other functions. It is not morally wrong to exercise such a faculty when not all of its functions are operative, so long as none are actively suppressed (by whatever means). It is not morally wrong to remove the food-value from otherwise nourishing food and eat it for the taste alone, because food is not a faculty. One need not have as a goal any of the functions of a faculty in exercising the faculty.

The sexual faculty has three functions: pleasure, expression of love (recognition of the other's personhood); and it is the kind of act which is reproductive (though not every act reproduces). It is morally wrong to exercise the sexual faculty in such a way that one of its functions is suppressed or contradicted in the exercise. It is not morally wrong to have sex for some purpose which has nothing to do with any of its natural functions, as long as none are contradicted by this exercise. It is not morally wrong to suppress

technologically the functions of sex if the purpose is to make it easy not to perform the act. Masturbation is morally wrong, because it cannot be construed to have anything to do with another person or with reproduction; even mutual masturbation is wrong, because this type of exercise is not something that even can be reproductive. Sex with inanimate objects or other species is wrong for the same reason. For this same reason it is morally wrong to have sex to orgasm in a human being other than in the corresponding sexual organ of the other person, though foreplay of this type is not wrong. All homosexual uses of the sexual organs are morally wrong, because this type of sexual activity cannot be reproductive, though there is nothing morally wrong with a homosexual's being homosexual, or even having heterosexual intercourse if he is capable of it, or with expressing his love for others of the same sex by other means than by use of the sexual organs.

Since sex involves another person, rape, or having sex with someone unwilling, is morally wrong, even if the person is one's spouse. Contraception is morally wrong, because it pretends that an act while reproductive is not reproductive. It is not wrong, however, to have sex while one or both of the partners is infertile, though it is immoral to choose to have sex with a partner with the intention that no child ever result from the whole series of acts. This is true even though a couple has a moral obligation not to have more children than they can afford to bring up decently. It is morally legitimate to have sex during infertile periods to limit the number of children one is going to have, using the Double Effect. This is not the same as contraception, which violates the act to achieve the same (good) effect.

It is morally wrong to get oneself into a situation in which he can act without being able to control his actions; thus, getting drunk and high on drugs that have this effect is wrong.

[5] Since we have no faculty of speech as such, analogies with multiple-function acts like sex do not apply. Therefore, it is not morally wrong to talk to oneself or to talk to animals which cannot understand what one is saying. It is morally wrong, however, to communicate to a human being (by whatever means) as a fact what is thought not to be a fact; this is a lie. A linguistic expression communicates what could reasonably be expected to be understood from it. Thus, many expressions that sound like lies are not, because they are not expected to be understood in their literal sense. A person does not have an obligation to communicate anything to another person, unless the other has a specific right to know it; in fact, a person has an

obligation to conceal information from others if it would be damaging to someone to reveal it; but he may not conceal it by lying. He must either not say anything, or if silence communicates, he must say what communicates no information; in contexts where it is known that a false statement will not be believed, the false statement may be uttered, since then it communicates nothing.

Section 3: Religion

[1] This Section is a kind of *apologia pro fide mea,* more than anything else. [2] Religions are a cross-cultural constant, based on the fact that people recognize at least vaguely that there is a God and an afterlife, if only by the inadequacies and injustices of this life. More than anything else, we need redemption, in the sense that we need to know that the damage we have wittingly or especially inadvertently done to others has worked out to be better than if it had not been done. If there is no redemption, suicide is the only rational alternative; Camus was wrong in accepting the absurdity and living.

[3] It is not surprising to find that all religions have common elements, not only because of human needs, but if God has offered redemption, then he would not deprive people of knowing that it was offered. [4] But revealed religion would be reasonable based on how badly we read evidence.

If the books of the New Testament are looked at dispassionately in the context of the sophisticated Roman empire, it is impossible to explain the writings as legends gradually accreting around the wise man Jesus. If he did not come back to life, the writings make no sense, and their acceptance is even more absurd. The reason I am a Catholic is that this is the community which most reasonably traces its origins back to the original emissaries of Jesus, and which is dedicated to keeping the original understanding of the facts intact; it seems to me that such an organization with such a purpose would be required if God had in fact become human and was serious about people's actually knowing this.

Part Six: Modes of Relating

Section 1: Rights

[1] Human beings have two distinct ways of relating to each other: the economic, dealing with rights and compensation, and the social, dealing with sanctions and cooperation.

[2] The concept of "rights" has a long and convoluted history; but basically what emerges [3] is that a right is a moral power to do something, in the sense that it is not wrong to do the act, and it is wrong for anyone to try to stop you from doing it. The basis of rights is the fact that we are persons: self-determining beings whose self-determination can be interfered with by others' self-determining acts. The basis is *not* "equality" with others. Non-persons such as animals have no rights, though we have certain obligations toward them based on our ability to empathize. Non-existent beings like future generations have no rights, though we have obligations as if they did, because we can foresee that they will probably exist and need certain things. No one has a right to do anything that violates any right of anyone else.

[4] But since rights conflict, the general basis cannot be the basis of a rights claim, or people would be prevented from acting, not enabled to act. Still, in general, a person must be allowed to do whatever he chooses as long as he is capable of making a rational choice, and what he does does not come in conflict with someone else's right. But the basis of a claim to any specific right is some aspect of the person's present reality which would be contradicted if he were not allowed to perform the action: some damage to his reality as it now exists, not some desire or goal he is seeking. The title to the right is the aspect which would be contradicted; this must be something that others can observe, since they must refrain from violating the right. We have rights against the people who can in practice violate them; when the right involves having something done to us (whose omission is equivalently doing damage), the right is often against very definite people, such as parents.

[5] A right would not be a power to act if it could not be defended; but defense often violates a right of the violator. The "unjust aggressor" theory of defense of a right does not work, for various reasons; defense of a right uses the Double Effect. The harm done to the violator is not the means to the defense, even if the violator is shot (in defending one's life, for example),

because often he does not die (and the right is intact), or dies significantly after the attack has stopped. One can only defend the right against some act directed against it, not a mere threat. No harm may ever be done to the violator (or any person) because he "deserves it." It is immoral to be happy about harm to any person. Vengeance is never legitimate because it necessarily involves willingness to harm the other. Finally, one may never deliberately inflict greater harm than the harm which would be done if the violation of the right were allowed. This also applies to war, as well as personal defense.

A person may take action to defend another person's right against a violation. The possession of a right, however, carries with it no obligation to exercise it; and so a person need not defend himself against a violation of the right, as long as the right is not one implied by some moral obligation he has. Coercion is the use of moral force (threat of harm) which violates a right. A person must always refuse to do a morally wrong act, no matter what the coercion, and must try to defend his right to refrain, if possible. A person may morally refuse to do what he is coerced into doing (if it is not morally wrong); but may also yield to the coercion, using the Double Effect; but he may not yield if the violation of another person's right is involved.

[6] A right is absolutely inalienable if the possessor may not morally give it up; it is relatively so if he may morally give it up but if civil society may not force him to give it up. A privilege is the granting of some power as if the person had a right, when in fact he does not have title to the right. Human rights are rights we have by title of our humanity; civil rights by title of citizenship. Every human right must be made a civil right also. Acquired rights are rights gained by performing some action to acquire the title; contractual rights those gained because of mutual promises; implied rights are those that deal with acts necessary for the performance of some act that a person has a right (or obligation) to do.

[7] We have *no* human right to be treated equally with others, because we are not in fact equal. But, though individuals do not have rights to do certain things, members of a class as such may not be prevented from doing the act if there is nothing in their nature as such that prevents them. This would be to say that because they are Black, for instance, they are incapable as such from doing what they are capable of doing, and is a contradiction. We do not have a right to equality of opportunity, however, because there is no meaning to this in practice; and by the same token, no one has a right to equality of income with anyone else.

Since the right to life is absolutely inalienable (as implied by the command not to choose one's death) a person may not be killed even if he wishes to be killed; nor may he be deprived of what is necessary to sustain life. Life sustaining things are what any person needs to live. If he is dying, however, his death need not be postponed if the Double Effect applies; and if he wishes his death not to be postponed, his wishes must be respected.

Abortions are morally wrong, except, using the Double Effect, to save the life of the mother, since embryos and fetuses are in fact persons and so have human rights.

It is morally wrong to deprive a person of some ability he has by his genetic potential, either by direct action or by refusing to provide what is necessary to exercise a function. A human being has an inalienable right to health care.

Section 2: Economics

[1] Practical activity is use of things to be able to perform essential acts or to achieve one's goals; economic activity is engaging in transactions to be able to perform essential acts or achieve one's goals.

[2] There are Six Great Myths (in the sense of untrue but unquestioned beliefs) behind economics as now understood: (1) All men are created equal. This is simply false. (2) We are never satisfied. In fact, people's goals are not infinite, and very often are reached in practice. Therefore, it is not the automatic tendency of people to maximize their own gain. (3) The market price expresses the real, objective value of a product or service. In fact, the product or service has no objective value at all. (4) Economics is subject to mathematical analysis. Just because prices involve numbers, subjective assessments of relative values cannot be rendered objective by applying mathematics to the numbers; economics of aggregates is essentially mob psychology. (5) Necessities are very valuable values. In fact, necessities are in a totally different class from values, and are incommensurate with them. (6) Economics is amoral. In fact, as a human activity, it is subject to moral constraints; the attempt to make it "descriptive" actually creates a false normativeness.

[3] We have a human right to own consumable items because otherwise we could not consume them, and then we would die; we have a right to store more than we need at the moment, implied by the obligation to provide for

the future. We have a right to stable property for shelter and to use for food, or we could not survive. There is no limit to how much we have a right to own, except the dehumanization of other because of the ownership. We also have a human right to pass on property to heirs, implied by the obligation to take care of those dependent on us.

A person has no automatic right to the fruits of his labor, if he is working on something that someone else already owns; this would make ownership and cooperation in practice impossible. Locke was wrong. A person acquires the right to own something not previously owned by asserting a formal claim to it.

The right of ownership is not absolute; if owning things deprives others of the means to live a human life, then one loses the right to part of what one owns. Absent this, great disparities in possessions are not morally wrong. In practice, civil society must discover how many are dehumanized by their neediness and how much, and how much each affluent person has lost the right to of his possessions; and it must redistribute this necessary amount but no more. An affluent person has no strict obligation to help the poor beyond this paying of taxes, provided the government is doing a fair job.

[4] Since values are personal and depend on goals, then in a swap involving only values, both parties gain, because each gives up what is less valuable to him and gains what is more valuable. In such transactions, there is nothing wrong with trying to gain as much as possible, looking to what value the other person sets on the object. But exchanges involving necessities are always to the disadvantage of the one who receives the necessity, because he gives up a value for something he has a right to have as human. Hence, a person exchanging a necessity for a value has a right to recover the value (to him) of what he is giving up, but no more.

[5] A service is an action of value to another, performed in exchange for a value or necessity. It is neither slavery nor love; it involves compensation (the value received for it). The seller-value of a product or service is its value from the point of view of the one performing it; it is what he is giving up in not pursuing his own goals. The buyer-value is the value from the purchaser's point of view; it is how important the goal it leads to is (how useful it is). These two cannot be reduced to each other, and neither follows from the other. The cost of something is what is given up to get it; the price is what is exchanged for it. There is no "real" price for anything; price is a compromise between the buyer-value and the seller-value. The market is the set of buyers

who want the product or service and the set of sellers. The demand is the number of instances of it that buyers will buy at a given price; the supply is the number of instances offered at that price. Supply or demand is elastic if it changes when the price changes; otherwise, it is inelastic.

Marx's analysis of price, supply, and demand is faulty because it assumes that there is a real value to something; but the labor theory of value does not work; it assumes that value reduces to seller-value. Contemporary economic analysis, however, has fundamental flaws of its own, assuming that value is really buyer-value.

[6] Money, as buying-power is a certain amount of freedom to use others' freely offered services to fill one's necessities or make progress toward one's goals, recognizable universally as this amount of this type of freedom. It must be defined by the government, whose function it is to keep it stable. An economic system is a system of interaction, organized in such a way that the subordination of one person's own reality to the goals of another person is compensated for by receiving the ability to subordinate other's reality to his own goals. A person's scale of living is the type of life his resources will allow; his standard of living is the resources needed to achieve his goals. In purchases involving only values, it is perfectly moral to agree on a price that is even outrageously beyond the seller's standard of living. A person is rich or wealthy if his resources are greater than his standard of living; he is affluent if his resources enable him to live at a higher scale than the majority of people. A person is poor if his resources will not allow him to live at his standard, and needy if his resources will not allow escape from dehumanization. A person can determine his standard of living by finding out how much money is required to achieve his goals. This income level determines his happiness, economically speaking. Money allows a person to choose as his service what he enjoys doing, if it happens that others want the service.

When necessities are involved in the service, a person has the right to live decently from his service, but has a moral obligation not to become wealthy or very affluent from it, because he is in fact exacting the money by in effect threatening the other party with dehumanization. In cases where necessities are involved, the market must not be allowed to set prices, because the prices deprive one party of his rights.

A person has no right to receive from others even the minimum necessities of life if it is possible for him to acquire more than the minimum by serving others.

It is morally wrong for those buying a service from someone to force him to accept a price so low that all he can do is meet his necessities. Necessities affect the seller sometimes as well as the buyer. Minimum compensation must be above the place where seller-value begins (because otherwise the person would be dehumanized as not free in practice); but this is at different levels for different people, depending on how many dependents they have.

[7] An entrepreneur is a person who offers a service or product to the public; the firm is the social entity which does so. The entrepreneur does not own the firm, because you can't own a promise; hence the firm has two coordinate purposes: to serve the public and to make money for the entrepreneur. Neither of these is a means toward the other. Since the entrepreneur is offering his service or product, he must not misrepresent what he is offering; hence false or misleading advertising is morally wrong. It is not morally wrong to conceal irrelevant information, however. Profit is the part of the price that the entrepreneur receives beyond compensation for his costs. There is nothing wrong with profit, even very high profits where values and not necessities are involved; necessities require prices that ensure profits leading to nothing more than a decent living.

Contracts in which one party is required to do what is morally wrong are non-contracts, contradicting the basis of contracts (the morality involved in keeping promises), and laws must be passed to prevent them. Surrogate mother contracts are invalid for this reason. Contracts may be violated by nonfeasance, misfeasance, or malfeasance. A person cannot be held to a legitimate contract if unforeseen circumstances make it dehumanizing to fulfill it; in such cases, laws of bankruptcy, forcing the other party to accept only partial fulfillment, are proper.

Section 3: Society

[1] Humans are by nature social animals; we cannot realize our human potential without society; hence society is a human necessity. [2] Societies, however, are systems, not bodies; they exist for the members, not the other way round. Totalitarianism is a false theory of society. Nevertheless there is a real but secondary subordination of the member to the society.

Societies involve communities, but are not the same as them; a community is a set of people who have common interests and concerns and share them with each other. What makes a set of people a society is that they cooperate.

Cooperation is the fact that each member of a society does something that benefits the other members more than himself, and does this in such a way that what he does is predictable by the other members.

The common goal of a society is the purpose for which the members cooperate; different common goals define the different kinds of society. The common good is the rights of the members which were not freely given up on joining the society. Traditionally, this is thought to be the "well-being" of the members; but since the members are self-determining and there is no objective meaning to "good," then this "common good" must be merely negative.

[3] Since cooperative conduct implies that the act at the time is not for the member's advantage, the act cannot be counted on (as it must be) unless some incentive is attached to it, and this is the sanction: a threat of punishment connected with not doing the cooperative act. Rewards are not in practice possible as motivators in society, and they really belong to the economic relation, not the social one. A law is an assignment, with a sanction attached, of a role to a certain status in the society; and authority is the status which has the right to issue laws.

Sanctions in order to motivate conduct must be sufficient (outweigh disadvantages the normal person would have in obeying), appropriate (apply to exactly what is commanded), and inevitable (apply every time obedience is required). Sanctions must be just barely sufficient, because otherwise their imposition would be unnecessary cruelty to the members, and violate the common good; and obedience absolutely every time is not required for society to exist, but only obedience "practically all" the time. Since laws encroach on a person's self-determination, every society must try to have the fewest possible laws: only those necessary to achieve the common goal (and protect the common good). Laws unrelated to this are not laws, and should not be obeyed, unless the Double Effect applies.

Laws must be promulgated: communicated so that the members can know what they must do and that they must do it. Legislators need not see to it that every member *does* know the law, but only that it is reasonably possible to do so. Improperly promulgated laws are not laws, and need not be "obeyed." Unwritten laws are not laws, but informal expectations that the members have about each other's conduct; these are the "laws" of the community, not the society.

Punishments can be imposed, in spite of the fact that they violate the law-

breaker's right, because the damage to the lawbreaker is not chosen, using the Double Effect. What society is trying to do in punishing the lawbreaker is not to harm him or take vengeance for his act, but to avoid giving the impression that people can violate the law and get away with it (it is seeking to protect the threat as a real threat, because without it there is no law, and without law, no society). Hence, the action is taken by society in self-defense. It is not using the punishment as an example to future lawbreakers, but avoiding having his escape of punishment be a green light to future lawbreakers; the distinction is significant, because in the first case, the harm would be a means to the good effect. In the second case, if the person by some accident escapes the harm, the society has still shown it was serious about the threat, which is all that is necessary. The other rules of the Double Effect also apply, as long as the punishment is not given to the lawbreaker on the grounds that he "deserves" it, because then the harm would be intended.

The death penalty would be justified in those cases such as terrorism where not imposing it would be reasonably expected to encourage such acts (e.g. in order to free the convicted terrorist prisoner), and the acts destroy the human life of the members of society. Since the death is not chosen, but more deaths avoided, this is actually a pro-life position.

[4] There are three senses of "justice," which in general is the virtue of fitting one's action to the reality of the other people affected by it. Commutative justice does not violate the rights of others; retributive justice imposes penalties on lawbreakers, consistently with involving the least harm on each compatible with preserving the sanction; distributive justice (applying mainly to civil society) that of exacting cooperative acts from those whose cooperation inconveniences them least, and giving to those who need the society's help most. Commutative justice is the one which applies to the economic relationship; the other two to the social relationship; and so these latter two do not deal with rights.

[5] Authority is a status; leadership a personal quality of persuading others to do what one thinks is best. Leadership is very desirable but not essential for those in authority. Authority is necessary, because society cannot exist without laws, and the members must know which person in society speaks with the voice of the society. Authority itself confers no special wisdom on the person in that status; the person must seek advice from the wise members of society and information from all. A society is not a family, where the adults command because they know more. Nor do the mass of members taken as a whole

possess any special wisdom by which they know how best to achieve the common goal. Any member has a moral obligation to inform the authority of information he has relevant to pending legislation; authority must leave communications open. And when listening to advice from the few wise members, the authority must defer to their judgment, not rely on his own wisdom; the final decision is to be the society's not his own.

In executing the laws, the authority is to do as little watching over the people as possible consistent with seeing that the laws are obeyed "practically all" the time. It is wrong for the police to interfere with the private lives of the members, unless there is prior evidence of likely violation of a law; but they may use evidence of a violation of some other law uncovered in a legitimate search. No member may morally be forced to testify against himself; and certain members such as doctors and priests who need confidential information must not be forced to testify against other members. It is morally wrong to encourage the members to act as spies on each other; but if a member happens upon information of a violation, he is morally bound to report it, unless the Double Effect applies. It is morally wrong to tempt a member into a violation in order to catch him in the act.

The judicial function of authority imposes the sanctions and settles disputes among members. In imposing the sanctions, it must discover that the violation actually occurred, and assess the circumstances and personalities so that the least severe punishment can be assigned consistent with preserving the sanction; this will mean different punishments for different types of people for the same crime. In settling disputes, it is morally right for authority to force a person to give up a right when this is the only way of settling disputes in which individuals' rights contradict each other.

The person in authority is responsible for everything the members do in obedience to his commands; he is responsible for acts that could have been prevented by passing a law against them; he is responsible for violations of the law which are due to lax enforcement or too light sanctions; but he is not responsible for what members otherwise do in violation of commands.

The person in authority has the right to be obeyed; to be respected because of his status; to be informed about what is relevant to laws; to impose sanctions on lawbreakers; to force members to agree to his settlement of disputes. All these rights are limited by the common goal of the society and the common good of the members.

The types of authority are (1) anarchy, which is no authority at all; this

exists only in marriage. (2) Monarchy, with one person in authority; bureaucracy is monarchy (or oligarchy) in which levels of lesser authority are delegated from the top authority. (3) Oligarchy, in which a relatively small committee has authority and decides on laws and so on by consensus; a republic is an oligarchy of members selected periodically by the whole membership. (4) Democracy is authority left to all the members, who decide everything by majority vote. There is no "natural" form of authority, nor any one that is best in itself; each has advantages and drawbacks; and what is best for a given society depends on the spirit of the members. A constitution o a society is legitimate if there has not been from the beginning rebellion against it on the part of a significant number of members; it is assumed that absent this, the members are giving tacit consent to be governed in this form, and so it cannot be changed except by methods that are in the constitution itself, unless the government becomes tyrannical and violates members' rights and the only way to correct things is by overthrowing it, provided something better is foreseen to replace it. That is, the Double Effect must apply to revolution, not simply the desire for something better.

[6] As to members, each has the obligation to obey all the laws, except in cases where obeying would be contrary to the reason why the law was passed. This obligation applies even to foolish laws. But any law which commands a person to do what is morally wrong is not a law and must be disobeyed; if the law commands something that is not wrong, but violates a right of the member, he should disobey, but may obey using the Double Effect. One effect to be taken into account is the probable undermining of authority because of disobedience. Members must give authority information relevant to laws and violations; they must give authority their wisdom if asked. Once having supplied this, the obligation is discharged, and one need not (and must not) press the point. Immoral and unjust laws must be changed, by processes within the constitution if possible. Members must seek harmonious relations among themselves, since the lack of this makes cooperation very difficult; they must also not act in such a way toward outsiders as to bring disgrace upon the society; they are its representatives to others.

Members are not morally responsible for what they do in obedience to legitimate commands, because then the authority is in control (they must morally obey). They are responsible for what they do in disobedience to commands, and in obedience to unjust or immoral commands. They are responsible for the authority's foolish commands if they did not give

information they had which would have prevented it.

Members have all their human rights except those they freely gave up to become members. They have all their civil rights also. A society may prevent a member from following his conscience, using the Double Effect, when some right of some other member would be violated by his doing so. Members have the right to be treated as adults and not be patronized by authority. Members have the human right to privacy. This human right is implied by the obligation not to communicate what is false. Everything one does communicates information about oneself, so to avoid giving the wrong impression, it is necessary for others to know that they do not know all the facts about a person, to prevent them from making rash judgments. Hence, a person has the right to conceal any information about himself he wishes, as long as no other person is dehumanized by this concealment. A member of society also has a right to a good reputation, because it is very difficult to function in a community if one is despised by the other members. The public therefore has no "right to know" information about any person in a society, including those in "public life" unless the information is necessary for the public to perform some act they have a right to perform.

Section 4: Societies

[1] Everything said here presupposes what has already been said. [2] Marriage is both freely joined and not freely joined, because the sex drive and love makes not living with the beloved a kind of threat. Marriage is the society which provides the conditions for being able to use the sexual faculty consistently with itself.

Sex is a reproductive type of act, and this means that a child, who needs at least 12 years of nurturing by both parents, can result; and a child has an inalienable right to support by his biological parents; he can be raised by others or by only one only if the Double Effect applies. Parents must "want" children in the sense of being willing to care for them, not in the sense of their being means to their own fulfillment. Hence, the sex act is *ipso facto* the act of marriage; it implies a long-term commitment, and is contradicted if exercised without this. Further, sex is by nature "addictive," and one cannot predict that the other person will not become permanently attached because of the act. Also, the sexual urge does not disappear after childbearing years, and after people have ceased to be physically attractive; the only way this can

be satisfied is in marriage when the people have loved each other for a long time. Further, since women have the children, the only way women can be sexual equals of men is if men are forced by society to take the responsibility for their sexual activity, and sanctions are enforced against sex outside of marriage. Homosexuals cannot marry, because homosexuals cannot exercise sex consistently with each other. They can have a stable, loving relationship (without sex), but this is not a marriage. Similarly, people who, because of injury, cannot perform the sex act, cannot marry, though they too can enter stable, loving relationships. People who are capable of performing the sexual act may marry without ever having sex, if the Double Effect warrants it.

Marriage is dissolved only by the death of one of the spouses. Couples can separate, but neither can marry while the other is alive. The possibility of divorce militates against the commitment implied in sex; and so even were it allowed in extreme cases, no matter where the line was drawn, those just inside the line would demand that they be allowed divorce, and so it would become more than simply very rare. Divorce also predicts many very lonely old people. Divorce also puts great strain on the virtue of men, whose sex drive is more promiscuous than women; they need all the help from social pressure and laws they can get to use their sex consistently.

Since marriage is a commitment for life, then it is immoral to marry for the sake of one's own fulfillment; hence, marriage presupposes actual love of the partners for one another (willingness to be "used" by the other). But marriage is not "total giving"; one does not disappear in the other, and may not do what is morally wrong "out of love" for the other. Marriage is not a "union" that is a third thing that emerges; the motivation must be for the other person's happiness, not the "good of the marriage." It is by letting the other be herself that one "unites" oneself to her, because her goals become one's goals for oneself. Marriage is not "total openness," in the sense that neither partner has no privacy from the other. Things that would hurt the other need not be revealed. What must be done is to show that nothing revealed will make any negative difference to oneself; then everything can be revealed without forcing a revelation on the unwilling partner; "openness" is to be receptiveness only. Marriage is not helping the other to be a better person, but absolute acceptance of the other for what she is and deference to her self-set goals. Marriage is not a contract by which each agrees to do some things in return for some others; that is an economic relationship, and implies

self-fulfillment as its purpose, not love. Marriage is a covenant, not a contract.

Because marriage presupposes love, there is no authority; neither spouse has the right to give orders and threaten punishment. This power is not needed, nor are there grounds for it, because neither sex is by nature wiser than the other (which would be the only natural grounds for having authority).

There are two necessities in a marriage: the resources, and the style of living. Traditionally, husbands have been held responsible for the resources and wives for the life style. Society has a right to know who is responsible for what.

[3] The common goal of the family is to provide the conditions for the children's development into full human beings. Children become adults when civil society starts considering what they are expected to do for the cooperative benefit of all. The family ceases to exist as a society when the last child reaches adulthood, though as a community it can last longer.

The biological parents by their nature have joint authority over their children, because they caused them to begin to exist, and the children, when young, cannot make rational choices for themselves. The joint authority means that neither parent may countermand a command by the other, unless obedience would damage the child. Parents' authority extends only to acts which promote the child's growth to a responsible adult; but this does not mean that chores cannot be assigned, since people need to learn to cooperate. When children violate commands, they must be punished appropriately. But parental authority diminishes gradually as the child grows older and more experienced, until it finally ceases at adulthood.

Parents, while in authority, have the right to be obeyed, and to punish disobedience. All their lives they have the right to be respected and loved (though not necessarily liked); they have the right to live their own lives insofar as this does not interfere with the children's development. They have a right to be supported in old age by their children if they cannot support themselves. They have a right against outsiders not to be interfered with in bringing up their children according to their own consciences. Civil society must not set up roadblocks against this (e.g. educating children according to the parents' consciences).

Children have the right not to be physically, emotionally, or intellectually damaged by their parents or anyone else, with or without parents' consent. They have the right against their parents to the physical, emotional,

intellectual, and economic means necessary to grow up so as to be able to function as adults; they have a strict right only to the minimum necessary. They have a right to be respected as person, though not a right to be treated as little adults. As they grow older, they have an increasing right to privacy against their parents.

[4] Civil society is the society whose common goal is the common good of the members. People cannot exist as human without civil society, since if people do not cooperate to ensure that no one's rights are violated, their rights will be violated. Hence, it is morally obligatory to belong to civil society.

Civil society can have no common goal except to see to it that the members cooperate to prevent dehumanization of any member. A citizen in the full sense is any adult who was born into the society and has not become a citizen of another country. Citizenship in a lesser sense applies to fetuses, children, and naturalized people. There are privileges also granted to resident aliens and other.

The Principle of Subsidiarity: If an individual or smaller society can perform some function, civil society must not take over that function. That is, civil society must let citizens fend for themselves as much as possible, because otherwise their self-determination is contradicted.

But "protection of rights" must not be defined so narrowly that there is a failure to recognize positive rights. People need minimum ability to move from place to place, which implies roads and bridges, which they cannot in practice supply for themselves. Where the line is to be drawn between so little done that rights are violated and so much that self-determination is violated is a matter of legitimate debate. The point is that government must do only the minimum, and not be concerned with "the good" for the citizens.

The Principle of Least Demand states that when government makes demands on some citizens to prevent dehumanization of others, it must make the smallest demands on the fewest citizens possible. Otherwise, the citizens would find it necessary (commanded) to do more than what is necessary, and people must be left alone except only to the extent necessary to prevent dehumanization. This principle is the basis of distributive justice. Note that government need not and should not feed someone who is starving and can work and refuses to do so; government may intervene to prevent self-destructive conduct on a citizen's part only if this conduct violates someone else's right. Government must allow formation of lesser societies

with specific common goals, as long as they violate no one's rights.

Government may not establish one religion that everyone must belong to; but it may not interfere with the operation of any religion except, using the Double Effect, to prevent violations of any citizen's right; and the religion may not interfere with civil society except to prevent its violating the members' consciences or people's rights.

Government's function is to protect rights of citizens against attacks by other people, and this includes assault as well as actual battery. It is to protect citizens against economic exploitation by others. It must define what money is, and keep it stable, as far as possible. It must see to it that contracts are enforced and regulate the conditions for bankruptcy. It must supply necessities to those who cannot get them for themselves. This includes minimal recreational opportunity, education, etc.

Civil society has the right to exist and function according to its constitution, and the right to defend itself and its form of government against attacks both from within and without. It has the right to go to war to defend itself (or its allies) and to demand that citizens serve in the armed forces for this purpose. In defending itself, it must use the Double Effect, choosing only its own defense and not any harm to anyone on the opposing side. It may destroy only things that are explainable only in the context of war, such as armed soldiers and munitions factories, not things that would be also going on in peacetime, such as food supplies. It may not refuse to go to war to defend itself if this is the only way that it can be defended, because it has an obligation to protect its citizens.

Civil society has the right to pass laws and impose sanctions, insofar as these are necessary to avoid citizens' dehumanization. It has the right to tax citizens, and the right of eminent domain over property owned by them, giving a fair price when it is seized. It has the right to regulate marriages, and to protect children from their parents if parents are doing them damage; and in general to set minimum regulations for social order.

Members of civil society have the duty to love and respect their country, and to obey its legitimate laws. They may revolt only if the government is blatantly tyrannical, constitutional methods of change have been exhausted, and there is hope of success from the revolution.

Citizens retain all their human rights, even the relatively inalienable ones, such as ownership; they have the right of self-determinism against government paternalism; but they have the right to be supported by government if they

cannot support themselves. They have all civil rights belonging to their status. Government does not bestow freedom on its citizens; the point is that it must take away as little as is consistent with preventing dehumanization of others.

[5] A firm with employees in it becomes a society in service to the public. An employee puts his service under the authority of another, and so the employer can set the conditions for the service and has control over more than just the results. But the employer's authority extents only to what is related to the service the employee was hired for; he does not own the employee. In general, he can refuse to hire someone who does not please him for whatever reason, but this right ceases if he is in fact if not intention part of a conspiracy to prevent a given class of people from getting a certain type of job for reasons unrelated to inability (such as sex or skin color). Affirmative action is morally justifiable to correct such invidious discrimination, but only to the point where the excluded class has in practice a reasonable opportunity to find this kind of work. "Quotas" should depend on the number of the people of this class *looking* for this type of work as opposed to the general population looking for it. Once an employee is hired, the employer has a certain commitment to keep him, which get stronger the longer he works for the employer; as time goes on, reasons for firing must be increasingly serious. The reason for this is that employment is a necessity. Employers have a right to impose sanctions for not following orders, but they must be the minimum necessary to get the job done. Responsibilities of employers and employees are the same as those listed under authority and those subject to authority. Employers should ask favors of employees only very rarely, and then only in circumstances where it is clear that refusal implies no harm. Working conditions must be such as to be consistent with human dignity, so far as possible. Government can set minimum standards for this.

When an entrepreneur hires employees, then he becomes the one in authority in the firm, which now has three coordinate goals: profit for the entrepreneur, employment for the employees, and service to the public. Employees are hired to work for the firm with its three goals, not just for the entrepreneur; and therefore they have obligations to the public and not just to the entrepreneur, and must not follow orders which imply disservice to the public. Entrepreneurs therefore must not be solely concerned with maximizing profit when hiring and providing working conditions for the employees. Government's role is providing employment is an absolute last resort; what it must do is provide conditions so that the private sector can

provide employment. Unions are legitimate, for the purpose of protecting employees against injustices and pressuring employers to advance all the goals of the firm. They must not be used solely for the interests of the employees against the other goals of the firm.

The entrepreneur deserves profit because of his double service: that of investing money in the firm that he could otherwise use for his own goals, and that of having authority (and responsibility) for what the members do. If his firm is performing a service which is a value, and if the employees are given decent wages (enabling them to do more than just what is minimally necessary to live human lives), then the entrepreneur may morally become fabulously wealthy from the profit; he need not cut prices or distribute the excess to the employees (though he may do so, of course). If the firm provides a necessity, his profit and employee salaries and benefits must be no more than allow a decent scale of living. But since entrepreneurs are necessary for the firm to exist, they must take care not to take advantage of the employees or the consumer.

In large corporations, investors only invest their money; they have no real authority; and so the return on their investment would ordinarily be less than with smaller firms, because their service is less. Of course, stock markets as a kind of financial roulette are not really investment, but gambling. The function of the policy-setting level of management is to see to it that all three of the goals of the firm are promoted, not that the firm is simply run as a machine for making profit for the investors.

As to government's role in economics, its activity may affect the economics of the whole country; but it is wrong for it to tinker with the economy "for the benefit" of the people. It must trying to have minimal impact, only that which prevents exploitation and dehumanization.

Part Seven: Modes of Development

Since this part is a compression of billions of years of evolution and history into a compass of less than a hundred pages, it would be absurd to summarize it. The basis thesis is that evolution and history can be looked at as a dialectic of love, in which God's respect for his creatures gradually becomes more pronounced, and creatures' love for each other becomes greater.

Appendix B

The Numbered Conclusions

Part One: Modes of Being

Section 1: Knowledge and Facts

Conclusion 1: The mind is capable of reaching absolute certainty.

Conclusion 2: it is certainly false that everything depends on your point of view; there is *no* point of view from which it can be true *for anyone* that there is nothing at all.

Conclusion 3: Truth is not a value.

Conclusion 4: Facts don't depend on anyone's knowing them.

Corollary: You can't make something a fact by wanting it to be a fact.

Conclusion 5: Our act of consciousness is conscious of itself.

Section 2: Causality and the Method

Conclusion 1: A single fact of itself cannot be an effect: there must be at least two facts in conflict in order for there to be an effect.

Conclusion 2: A situation is an effect because not all the information is known.

Theorem I: The cause is outside the effect.

Theorem II: The cause is not altered or different in any way by its having an effect.

Theorem III: Identical effects have identical causes.

Theorem IV: Different effects have different causes.

Corollary I: Identical causes have identical effects.

Corollary II: Different causes have different effects.

Corollary III: Similar effects have analogous causes.

Conclusion 3: The cause is not similar to its effect.

Conclusion 4: The causality of the cause is not a real relation to its effect.

Conclusion 5: Being-affected is a real relation.

Conclusion 6: An effect is explained by its cause; it is not necessary to have

recourse to conditions to explain the effect.
Conclusion 7: we cannot know all about the world using effects and causes.
Conclusion 8: The real is both rational and non-rational.

Section 3: Finite Consciousness
Conclusion 1: An act cannot be a conscious act if it is not aware of itself.
Conclusion 2: No sane person believes that only what he directly experiences is true.
Conclusion 3: One and the same consciousness is actually many separated consciousnesses.
Conclusion 4: But if there is a real effect, then there must be something that connects these separated periods of consciousness into one single consciousness.
Conclusion 5: the mind exists during the unconscious periods between periods of consciousness.
Conclusion 6: it is the same mind that exists between *all* the periods of the same interrupted consciousness.
Conclusion 7: the mind is not the same as consciousness.
Conclusion 8: there are different minds, a different mind for each individual stream of consciousness.
Conclusion 9: something about the mind limits the consciousness of any one of us to being just this stream of consciousness and no other.
Conclusion 10: a given period of my consciousness is a limited case of my consciousness.
Conclusion 11: One and the same consciousness is different at different times. (I.e., it differs from *itself*, in the sense of what it was at the other times.)
Conclusion 12: Not every conscious act is conscious *of* something (other than itself).
Conclusion 13: One and the same consciousness is different from itself at different times.
Conclusion 14: Any given way of being conscious is consciousness as containing what is outside itself within itself, or what is not itself as not different from itself.
Conclusion 15: My consciousness at any given moment leaves out all of itself except this moment of consciousness (which is just this way of being conscious).
Conclusion 16: Most of my consciousness is unconscious.

Conclusion 17: My consciousness at the moment is my consciousness *as less than* what it is for me to be conscious.

Conclusion 18: The form of consciousness is not "something," still less what we are conscious *of*. It is simply the manner in which we are conscious: the limitation or the finiteness of the consciousness.

Conclusion 19: An imaginary image *is* the act of imagining; the "little picture" is nothing but the limitation of the act, (i.e. the act as limited): a reawakening of a previous perception.

Conclusion 20: No way of being consciousness can be the cause of any other way of being conscious as "formed consciousness."

Conclusion 21: no combination of "formed consciousnesses," however many elements it may have, can be the cause of "formed consciousness" as a mode of finiteness of consciousness.

Conclusion 22: There are various senses of "finite" and "infinite"; and what is infinite in one sense can still be finite in another sense.

Conclusion 23: There must be something which is not a way of being conscious and is not the mind which can "restrict" my consciousness somehow to being just a *way* of being conscious.

Conclusion 24: Existence is not any "formed consciousness," and it is not the mind.

Conclusion 25: Any way of my being conscious has as its cause *both* existence *and* my mind.

Conclusion 26: my consciousness comes about as the result of an interaction between existence and my mind.

Section 4: Finite Existence

Conclusion 1: There are many different existences.

Conclusion 2: Something connected with the unity of my "whole" consciousness must make the past consciousness "potentially conscious" in the present.

Conclusion 3: The mind, in its interaction with existence, not only produces the particular way of being conscious, but stores this way as "part of" my stream of consciousness.

Conclusion 4: Since the mind itself is unconscious, then whether consciousness is imagining or not, it finds its "material" for the form it takes on *outside* of consciousness.

Conclusion 5: When we deliberately recall or deliberately make up a way of

being conscious, we do so at a very low level of vividness, whereas when we recognize ourselves as reacting to some existence, the level of vividness of the experience is much higher.

Conclusion 6: Any form of consciousness *as* a case of consciousness as finite needs an existence as its cause. Any form of consciousness *as* a case of imagining has the (present state of) the mind as its cause and one or more existences as its *condition*. Any form of consciousness *as* a case of perceiving has a direct interaction of the mind with some existence as its *cause*.

Conclusion 7: Imagining as such *indirectly* refers to existence, not directly.

Conclusion 8: It is impossible to imagine what has not been perceived in some sense.

Conclusion 9: We can only know that something exists if we recognize that (directly or indirectly) we are perceiving it.

Conclusion 10: Repetitions of the same perception are caused by the same existence.

Conclusion 11: Every existence is analogous to every other existence.

Conclusion 12: Essence is identical with existence as the cause of "formed consciousness."

Conclusion 13: Essence is different from itself in each case, and is less than what it means to cause "formed consciousness."

Conclusion 14: Essence is simply a name for the fact that existence is finite.

Conclusion 15: No single finite existence can be the cause of the fact that any other finite existence is finite existence.

Conclusion 16: The cause of any finite existence cannot be a whole of which the finite existence is a part.

Conclusion 17: The cause of the finiteness of any finite existence cannot be a combination of finite existences, even of an infinite number of them.

Conclusion 18: The cause of the finiteness of any finite existence cannot be a (finite or non-finite) non-existence.

Conclusion 19: There is a non-finite existence.

Conclusion 20: There is only one God.

Conclusion 21: There are *no* really distinct "parts" of any sort within God. God is absolutely simple.

Conclusion 22: God is not and cannot be an effect in any real way, of anything at all. God can "contain" no unintelligibility.

Conclusion 23: Everything but God is a finite existence.

Conclusion 24: Existence is activity. To be is to do.

Conclusion 25: Existence need not be acting *on* a mind in order to be active or to be existence.
Conclusion 26: God is pure activity.
Conclusion 27: God is not the only cause of any finite existence.
Conclusion 28: God is one of the causes in absolutely everything that is real or happens.
Conclusion 29: No finite act can act without God's *actively* causing it to do so.
Conclusion 30: God causes finite existences to exist as they actually exist, including their existence as effects of finite causes.
Conclusion 31: God cannot delegate his causality to any other being.

Section 5: Truth and Goodness
Conclusion 1: The mind is the cause of the subjectivity of all my forms of consciousness.
Conclusion 2: The self is the subject of consciousness, and the mind is that by which the self is the subject of consciousness.
Conclusion 3: Being is the object of consciousness.
Conclusion 4: What we know objectively is not the object, but facts about the object.
Conclusion 5: Facts do not exist as such.
Conclusion 6: In the truth-relation, the judgment must agree with what the fact is, not the other way round.
Conclusion 7: Truth is basically objective, but it involves the subject; this involvement, however, does not make it in any way partially subjective.
Conclusion 8: God has no ideals.
Conclusion 9: The notion that something "ought" to be a certain way always comes from comparing the facts to an ideal.
Conclusion 10: Since ideals are subjective, "ought" always has a subjective, not an objective, basis.
Conclusion 11: Goodness and badness are basically subjective, even though they refer to objects; the "goodness" itself (or the "badness") is not something objective about the object at all.
Conclusion 12: For God nothing is either good or bad.
Conclusion 13: Goodness and badness only occur from a human point of view.
Conclusion 14: Moral rightness and wrongness have in themselves nothing

to do with goodness and badness.
Conclusion 15: Moral rightness and wrongness are simply facts about the act in its relation to the agent. Moral rightness and wrongness are totally objective, and depend on no one's standards or even knowledge.
Conclusion 16: Every act of God is morally right.
Conclusion 17: Every act of God is moral.
Conclusion 18: It is not necessarily the case that God or his acts are good.

Part Two: Modes of Energy

Section 1: Energy
Conclusion 1: The form of existence is a mode of the finiteness of existence.
Conclusion 2: God is not a form of existence.
Conclusion 3: God cannot be perceived.
Conclusion 4: Quantity is a limitation of a form of existence.
Conclusion 5: God has no quantity.
Conclusion 6: Energy always is some *form* of activity.
Conclusion 7: Energy is an analogous term.
Conclusion 8: God is not energy, nor is his existence or activity energy.
Conclusion 9: The quantities of one form of energy will not apply to another form of energy in a simple way, but will be only analogous to them.
Conclusion 10: God is not in any position.

Section 2: Bodies
Conclusion 1: A system is a body if its behavior as a unit is significantly different from the behavior of its parts.
Conclusion 2: God is not a system nor a body.
Conclusion 3: A body acts as a whole in and through its parts.
Conclusion 4: The form of the unifying activity defines the kind of body.
Conclusion 5: The unifying activity of a body is not observable from outside it.
Conclusion 6:The unifying activity of a body is a form of energy (with a quantity).
Conclusion 7: The quantity of the unifying energy is related to the total quantity of all the energies that make up the body.
Conclusion 8: The quantity of the unifying energy accounts for there being many different bodies of the same kind.

Conclusion 9: Properties of bodies are always acts, and in fact forms of activity.
Conclusion 10: Properties of inanimate bodies are always forms of energy.
Conclusion 11: Properties reveal what the body is.
Conclusion 12: The properties do not exhaust the reality of the body.
Conclusion 13: God has no size, shape, or mass, or any other property, strictly so-called.
Conclusion 14: The natural state of an inanimate body is the lowest energy-level compatible with its form of the unifying energy.
Conclusion 15: Instability in an inanimate body always means an *excess* of total energy.
Conclusion 16: An inanimate body will be performing at any given moment all of the properties it can perform at that moment.
Conclusion 17: What an inanimate body will do will be predictable based on the total energy of the body.

Section 3: Change
Conclusion 1: God cannot change at all.
Conclusion 2: A pure spirit or pure form of existence cannot change at all.
Conclusion 3: A body in equilibrium will stay that way if left to itself.
Conclusion 4: A body in equilibrium will not either gain or lose energy.
Conclusion 5: The direction of any change is always and only from instability to equilibrium.
Conclusion 6: Every change has a purpose.
Conclusion 7: Equilibrium has no purpose.
Conclusion 8: Any instability in an inanimate body has to have been introduced from outside it.
Conclusion 9: All processes have a definite purpose, and processes are the only acts that have a purpose.
Conclusion 10: Purely spiritual beings do not undergo process.
Conclusion 11: Time is not real.
Conclusion 12: God is not in time.

Part Three: Modes of Life

Section 1: Life
Conclusion 1: From the point of view of the physics and chemistry of the

body, a living body maintains itself in an unnatural condition.

Conclusion 2: What gives the living body its biological equilibrium is the unifying energy of the body.

Conclusion 3: Life is not really a constant process; once maturity is reached, its tendency is to stay the same (equilibrium).

Conclusion 5: A living body is not always doing all that it can do at any given moment.

Conclusion 6: If an organism is not doing a given act, this does not necessarily say that its nature does not include the ability to do that act.

Conclusion 7: Biological equilibrium is the condition in which all of the living acts given in the genetic potential of the organism can be performed.

Conclusion 8: The genetic structure of the body is *not* the life of the body, or its unifying energy.

Conclusion 9: The purpose of growth (the biological equilibrium) cannot be determined by the quantity of the unifying energy.

Conclusion 10: The control of the living body comes from the form of its unifying energy, not from the quantity of that form.

Conclusion 11: If an organism is growing toward its mature state, the form of its unifying energy is the same as the form it has in its mature state.

Conclusion 12: God is the cause of the living being's being superior to the bodies it arose out of.

Conclusion 13: God must in some sense *be aware* of what is happening in the world.

Conclusion 14: God's active intervention in the world respects the reality of the creatures in it.

Conclusion 15: The growth of the population of a given species tends toward an equilibrium, after which the number of members of the species in the ecological situation stabilizes.

Conclusion 16: Evolution tends toward an equilibrium of optimum mutual adaptation; and once this is reached, (if ever) evolution will stop.

Conclusion 17: The form of the unifying energy of a living body has a certain independence from its own quantity, as well as a certain independence from the body it is organizing.

Conclusion 18: There seems to be a certain superfluity in living bodies, which do things, not because they are necessary or particularly advantageous, but simply because they can do them.

Conclusion 19: God creates the universe out of perfect love.

Conclusion 20: In order for existence to be in control of itself, it must not be dominated by (or under the control of) its quantity.
Conclusion 21: Life is essentially activity *in equilibrium*, not the activity which is process.
Conclusion 22: Life has no purpose as such; it simply is. The "purpose" of any given life is the biological equilibrium which its self-control determines.
Conclusion 23: God has no faculties; he is pure activity and cannot be inactive.

Section 2: Consciousness and Sensation
Conclusion 1: The act of consciousness is a spiritual act, not limited in quantity as energy is.
Conclusion 2: The faculty of consciousness must be organized with a basically spiritual act.
Conclusion 3: The soul of a conscious body must be basically spiritual.
Conclusion 4: Computers are not conscious and never will be.
Conclusion 5: *Sensation* is an act of consciousness which is (a) spiritual, but (b) in one or more of its "reduplications" of itself does so as one or more forms of energy, each with a quantity. These forms of energy are the electro-chemical acts of the brain's nerves.
Conclusion 6: Each energy-output in the brain above the threshold of perception is the energy-"dimension" of a given form of consciousness; and all of the activities of the nerves acting at a certain time is the energy-"dimension" of the polymorphous single act of consciousness (the perception and/or image) that is occurring at that time.
Conclusion 7: The *apparent* degree of vividness in consciousness is actually a *form* of consciousness that in itself is not a degree, but which is *caused* by the degree of the stimulating energy, and hence reports it.
Conclusion 8: The faculty of a conscious body that never performs more than an immaterial act must be itself organized with an immaterial act.
Conclusion 9: If a body is conscious but never performs an act that is more than immaterial, it has an immaterial soul.
Conclusion 10: An immaterial soul does not survive the death of the body.
Conclusion 11: An animal does not *consciously* control its actions; the consciousness is merely an epiphenomenon of the energy-"dimension" of the act.
Conclusion 12: The way you feel emotionally does *not* reveal the "true you";

you are not being honest with your real self if you (a) let your emotions rule you and don't deliberately control them, or (b) take your emotions as your "true attitude" toward something.

Conclusion 13: The goal of psychological or psychiatric treatment should be to get the patient back into *basic control* of his information and/or behavior.

Conclusion 14: The function of emotions in human beings is to provide information to the person, not to control his behavior.

Conclusion 15: All problems involving lack of control are *emotional*, and are not problems of "will."

Section 3: Understanding and choosing

Conclusion 1: Understanding is a distinct act of consciousness, different from sensation.

Conclusion 2: Computers cannot understand or think. They never could, and they never will be able to.

Conclusion 3: Understanding is a spiritual act; it has no energy-"dimension" at all.

Conclusion 4: Understanding, strictly speaking, has no faculty, since it is totally spiritual. It does, however, use the conscious "dimension" of sensation as a pseudo-faculty.

Conclusion 5: You cannot understand anything that you are not paying attention to, because it is not conscious (or does not have the proper level of consciousness); hence, instinct (and emotions) can *indirectly* control understanding by directing attention to or away from certain sensations.

Conclusion 6: The human spirit will create a *language* to store and retrieve and express to others its mental acts.

Conclusion 7: Once we have understood a concept, it becomes a permanent "dimension" of our spirit, but it is accessed only if its word (or a related image) is conscious.

Conclusion 8: If an animal can use an abstract language creatively, then the animal must be able to understand.

Conclusion 9: Human choices are free, though we may or may not be able to perform the acts we choose to do.

Conclusion 10: The fundamental option underlying every choice is, "Do I want to choose what is reasonable or what is unreasonable?"

Conclusion 11: The choice of an act as leading to a given goal does not give

that act that purpose. Physical instabilities have *in fact* their own purposes, and if one wants a given goal, one must *discover* what acts (if any) lead there.

Section 4: The human soul and Person

Conclusion 1: The human soul is a spirit that by its nature "reduplicates" itself as a form of energy, but need not do this in order to exist.

Conclusion 2: The more proper way to define the human being is as an "embodied spirit" rather than a "rational animal."

Conclusion 3: Human life must go on after death, because as a form of life it will continue existing if it can, and it can.

Conclusion 4: There is no built-in biological equilibrium, or purpose, for any human being.

Conclusion 5: Human life must survive death *in such a way that legitimate goals can be achieved* or human self-determination and choice contradicts itself.

Conclusion 6: Happiness is not possible for a human being unless life goes on after death in such a way that the person's legitimate goals can be achieved.

Conclusion 7: It cannot make sense not to violate your own reality (in situations where this is to your advantage) unless life goes on after death.

Conclusion 8: You and your world will be exactly what you choose it to be—no more and no less—with the single exception that self-contradictory goals will not be fulfilled.

Conclusion 9: Sexual and racial differences do restrict possibilities for activity, but in not many significant ways; but since the subform permeates the whole person, it creates a vocation toward a certain style of action or approach to action.

Conclusion 10: Human beings are not in their natural condition.

Conclusion 11: A self is a self for the whole of his existence, even when he is not exercising (or cannot exercise) his acts of understanding and choosing.

Conclusion 12: It is inconsistent for a person to choose his own development in such a way that he prevents another person from being in practice the self that he is. Doing so violates the *right* of the other person, and so one's own nature as a *person*.

Conclusion 13: A human being cannot develop himself as a self without being a person, related to other selves.

Conclusion 14: Human beings must not always demand compensation for performing services to others.
Conclusion 15: Human beings are related to each other not only economically (as "independent," with rights), but *socially* also (as "interdependent" and loving).
Conclusion 16: All ideals and standards that are not turned into goals allow you to do is complain about the way the world is.

Part Four: Modes of Thought

Section 1: Mysticism

Section 2: Formal logic
Conclusion 1: A statement cannot be meaningful and refer, either directly or indirectly, to its own truth or falsity.
Conclusion 2: The weak "is incompatible with" statement of contemporary logic has for practical purposes no occasion to be made as a statement.

Section 3: Mathematics

Section 4: Science

Section 5: Beauty and Art

Section 6: Humor

Section 7: Values
Conclusion 1: Values are *objective*, but *personal*.
Conclusion 2: A person does not "choose" or "develop" a value system. He chooses a set of *goals*, and these *automatically* carry with them the system of values implied in getting there.
Conclusion 3: Importance is subjective, not objective. Nothing is objectively important.
Conclusion 4: No object or act is objectively more valuable than any other object or act.
Conclusion 5: It is morally wrong for one adult to force another to act in

conformity with the forcer's value system.

Conclusion 6: Children and mentally incompetent adults must be forced to live according to a value system that is not their own at the moment.

Conclusion 7: Where depriving a person of being able to do what he is capable of doing becomes dehumanization is where the act prevented is one which *any* human being could be expected to be able to do just because he is human.

Conclusion 8: It is essential for a human being as free that a certain number of non-essential options be available to him to choose among.

Conclusion 9: It is immoral to deprive oneself of *any* essential act, however small, for the sake of achieving *any* goal, however important.

Conclusion 10: Essential acts and goals must not be classified with each other; they are in completely separate categories. Essential acts are essential, not important.

Conclusion 11: Necessities are of no value; they are neither worthless nor extremely valuable, but are in a different class, unable to be compared with values.

Conclusion 12: The greater or lesser value of a person's "life" in the sense of the usefulness of his actions has nothing to do with the person himself as being a value. Persons are ends, and must never be treated as means.

Part 5: Modes of Conduct

Section 1: Morality

Conclusion 1: There is a distinction in people's minds between acts that are disapproved of as "not done," (folkways), and acts that are morally wrong and *must* not be done.

Conclusion 2: Adults generally distinguish *feeling guilty* from *knowing that what we are doing is morally wrong*.

Conclusion 3: A person has a guilty conscience if he *knows* that what he has done is morally wrong; whether he also *feels* that it was wrong is irrelevant. Conscience is not a feeling.

Conclusion 4: No human being may ever deliberately act as if he were not a human being, no matter what the culture in its ignorance allows.

Conclusion 5: Emotions, instincts, and drives are not directly relevant to morality. It does not matter morally how you feel about something.

Conclusion 6: To the extent that emotions or drives actually *block out* of

consciousness information that would normally be accessible to us, to that extent choices to do what in fact is wrong based on this lack of information are *moral,* not immoral.

Conclusion 7: To the extent that emotions or drives create *misinformation* which the person takes to be factual, to that extent his choosing what he would otherwise know is morally wrong is a *moral choice*.

Conclusion 8: To the extent that instinct misinforms the person, making him think that something which is in fact innocent is morally wrong, his choice to do that act is *immoral*.

Conclusion 9: If a person chooses to perform an act and a drive prevents him from doing so, his moral status depends on the choice, not the act.

Conclusion 10: If a person in control of himself finds an emotion leading him toward some act that he *now* recognizes is morally wrong, *he makes an immoral choice* if he *chooses to let* the drive grow stronger until it makes the act seem morally innocent or forces him to act in spite of his choice.

Conclusion 11: A person who is under the grip of a drive toward some morally wrong act is only being immoral if *he is willing* to let the drive take over (or retain) control.

Conclusion 12: If a person under the grip of a neurosis is in other respects a moral person and if he is *dissatisfied* with himself as tending toward this wrong conduct, *he has a psychological, not a moral disorder*. If he "accepts himself" and does not care that the tendency is toward what is wrong, *his disorder is still psychological, but his willingness to be this way is immoral.*

Conclusion 13: It is immoral to allow oneself to acquire a vice if (a) one realizes that the acts are wrong and leading to a habit of doing wrong acts, and (b) one makes no effort to prevent the habit from forming.

Conclusion 14: A person cannot be responsible for what did not happen (even if he intended it to happen).

Conclusion 15: A person is not morally responsible for aspects of an act that he did not in fact foresee at the time he made the choice.

Conclusion 16: A person is not morally responsible for any aspect of an event that could not be avoided except by making an immoral choice.

Conclusion 17: A person's own conscience is always the "Supreme Court" in moral matters; the morality or immorality of a choice always and only depends on the conscience of the person who makes it.

Conclusion 18: Conscience has nothing to do with values.

Conclusion 19: It is *always moral* to choose to do what your conscience is

clear about, irrespective of the actual moral rightness or wrongness of the act.

Conclusion 20: You cannot be immoral by accident; you must deliberately be *willing* to be immoral.

Conclusion 21: A choice to do something your conscience is unclear about is *always immoral*, irrespective of what the facts actually are.

Conclusion 22: In seeking moral advice, the advice of the expert must be followed, unless there is *reason* to believe that he misunderstood the situation or was biased.

Conclusion 23: If it is known that generally recognized experts are divided, some thinking that the act is wrong and some thinking that it is right, then a person may morally take *the more lenient view*.

Conclusion 24: If there is no alternative that your conscience is clear about, and if you can't find out what the facts are about the moral status of the act in question, then you *must* choose *away from* the alternative that seems *worse*.

Conclusion 25: The actual act chosen is always in itself morally neutral; it is always either some aspect of it in the situation or some other aspect of the situation itself that makes it either consistent or inconsistent with the reality of the agent.

Conclusion 26: *Any* aspect of the situation *can* make the act inconsistent with the agent's reality, and therefore make it immoral for him to choose the act in that situation. A choice is moral *only if all* aspects of the situation are morally right.

Conclusion 27: a morally wrong goal will make the choice immoral, but a morally good goal is not sufficient for a good choice.

Conclusion 28: even if the goal is to avoid terrible wrong, it is *immoral* to choose a *means* toward this goal *that involves the smallest moral wrongness*. You may *never* choose *anything* wrong.

Conclusion 29: In general, if you choose an act, you are also choosing all of the effects you *foresee* will (or might reasonably be expected to) come from it. Hence, if any one of these is wrong, the choice to cause it is wrong.

Conclusion 30: No one has a moral *obligation* to do damage to himself to avoid greater damage to others, even if the Double Effect would permit it.

Conclusion 31: No one may morally choose an act whose effect is damage to himself if not choosing it simply means losing a *benefit,* however great the

benefit might be.

Section 2: Personal Morality

Conclusion 1: It is morally wrong for any human being to act as if he did not absolutely depend on God, not only for his existence, but for every aspect of himself and every act he performs.

Conclusion 1a: Conduct insubordinate to God or an insubordinate attitude is morally wrong.

Conclusion 1b: It is morally wrong to worship anything but the non-finite Activity.

Conclusion 1c: It is morally wrong to try to manipulate God or bargain with him.

Conclusion 1d: It is morally wrong to refuse to worship God, even if you never actively declare your independence of him.

Conclusion 2: It is morally wrong for a human being to act as if he were a spirit that "had" a body "attached" to it or as if he were just a body, even a body with certain spiritual "adjuncts."

Conclusion 2a: The more limited (more material) acts of the body are not to be regarded as "objectively worse" than the spiritual acts.

Conclusion 2b: It is morally wrong to follow instincts or emotions as if they indicated the direction our "true nature" is to take.

Conclusion 2c: We must see to it that, as far as possible, our drives do not become strong enough to take over control from our choice.

Conclusion 3: It is morally wrong for a person to deprive himself, by removal of a part, or suppression of the act of a part, of an *ability* he has by his nature as human.

Conclusion 3a: Parts of the body may be removed, depriving a person of the ability to perform their acts, when the Double Effect applies.

Conclusion 3b: Parts of the body may be removed and donated to others when the Double Effect applies.

Conclusion 3c: No one ever has a moral obligation to donate an organ to another person, even if the other person will die without it.

Conclusion 3d: Sterilization, in which the inability to become pregnant (or the inability to impregnate) is the means toward the desired goal, is immoral no matter what the goal is.

Conclusion 4: It is immoral for any person ever to choose his own death.

Conclusion 4a: It is immoral in general to choose an act which reason says

might result in your death.

Conclusion 4b: If the community at large, or unbiased experts in the field, regard a certain act as dangerous to your life, then absent evidence that your case is special, this is evidence that doing the act might in fact result in your death.

Conclusion 4c: A person can choose an act which reason says might or even will cause his death when the Double Effect applies.

Conclusion 4d: It is immoral for a person, except when Conclusion 4c applies, to refuse what sustains life.

Conclusion 4e: If a person is dying, he may refuse to take steps to postpone the death, though he cannot in general refuse what sustains life.

Conclusion 5: It is immoral to choose to harm your health.

Conclusion 5a: A person can do what has or might have the effect of harming his health if the Double Effect applies.

Conclusion 5b: A person must morally do what is necessary to maintain his health.

Conclusion 6: It is not morally wrong *not* to exercise a given faculty, even *never* to exercise it, unless the *effect* of refraining is some damage to the person.

Conclusion 6a: It is not morally wrong to use some device to enable the faculty to perform its act better.

Conclusion 6b: It is not morally wrong to suppress the functioning of a faculty when this is the same as not exercising it at all.

Conclusion 6c: It is not morally wrong to use a part of the body for some other function than the act of the faculty it contains, provided the faculty is not damaged and its proper function is not suppressed.

Conclusion 6d: It is morally wrong to suppress *one* of the functions of a *multi-function* faculty so that it can be *exercised* for one of its other functions.

Conclusion 6e: It is not morally wrong to exercise a faculty in circumstances when not all of its functions are operative, as long as the non-operating function is not *actively suppressed*.

Conclusion 6e1: It is not morally wrong to *remove* from otherwise nourishing food the food-value and then eat it for the taste.

Conclusion 6f: One need not morally have as a goal *any* of the functions of the faculty in exercising the faculty.

Conclusion 7: It is morally wrong to exercise the sexual faculty in such a way

that one of its functions is suppressed or contradicted in the exercise.

Conclusion 7a: It is not morally wrong to have sex for some purpose which has nothing to do with any of its natural functions, as long as none of them are contradicted in the exercise of the faculty.

Conclusion 7b: There is nothing morally wrong in technologically suppressing the functions of sex if the intention is to make it easy not to exercise the act.

Conclusion 7c: Masturbation is morally wrong.

Conclusion 7c1: Mutual masturbation is morally wrong.

Conclusion 7d: It is morally wrong to have sex with inanimate objects or living beings of a different species from human beings.

Conclusion 7e: It is morally wrong to have sex to orgasm in a human being other than in the corresponding sexual organ of the other person.

Conclusion 7e1: All homosexual uses of the sexual organs are morally wrong.

Conclusion 7e2: There is nothing morally wrong with a homosexual's (a) *being* a homosexual, (b) remaining celibate, (c) having heterosexual intercourse if he is capable of it, and/or (d) expressing his love for others of the same sex by other means than use of the sexual organs.

Conclusion 7f: Rape is morally wrong.

Conclusion 7g: Contraception is morally wrong.

Conclusion 7g1: It is not morally wrong to have sex when one (or even both) of the partners is infertile.

Conclusion 7g2: It is immoral to choose to have sex with a partner with the intention that no child *ever* result from the whole series of acts.

Conclusion 7g3: A couple has a moral obligation not to have any more children than they can rear decently.

Conclusion 7g4: It is morally legitimate to have sex during infertile periods to limit the *number* of children one is going to have, using the Principle of the Double Effect.

Conclusion 7h: Artificial insemination is morally wrong.

Conclusion 8: It is morally wrong to get yourself into a situation in which you can act without being able to control your actions.

Conclusion 8a: It is not morally wrong to talk to yourself or to animals which cannot understand what you are saying.

Conclusion 8b: If you are expressing yourself linguistically to someone who can understand you, it is morally wrong to *communicate* as a fact what you think is not a fact.

Conclusion 8c: A person has no moral obligation to communicate anything to another person, unless the other has a specific right to know it.
Conclusion 8d: A person may have an obligation to *conceal* some information from the person he is communicating with.
Conclusion 8e: It is morally wrong to conceal information from another by lying to him.

Section 3: Religion

Part Six: Modes of Interaction

Section 1: Rights
Conclusion 1: It is the *personhood* of those with rights that is the basis of their rights, not their "equality" with others.
Conclusion 2: Non-persons such as animals do not have rights.
Conclusion 3: Non-existent beings, such as future generations, have no rights.
Conclusion 4: No one has a right to do anything that violates any right of anyone else.
Conclusion 5: Any person must be allowed to do whatever he chooses, as long as (a) he is capable of making a rational choice, and (b) what he does does not come into conflict with anyone else's right.
Conclusion 6: The basis of any claim to the right to a specific action is some aspect of the person's reality which would be contradicted if he were not allowed to perform the action.
Conclusion 7: The title to a right must be something that others can observe, so that they can know that the possessor actually has the right.
Conclusion 8: We have rights against the people who *in practice* can violate the right.
Conclusion 9: A right can only be defended against some *act* that is directed against it, not simply against a person who has threatened to violate it.
Conclusion 10: No harm may ever be done to another human being on the grounds that that other person "deserves" it. It is immoral to be happy about harm to any other person.
Conclusion 11: Vengeance or "getting even" for an injury is never legitimate, because it involves choosing harm to another person.
Conclusion 12: It is immoral to choose an act which inflicts greater harm than necessary in defending a right.

Conclusion 13: A person may take action to defend *anyone's* right against an attempt by anyone else to violate it.

Conclusion 14: The possession of a right carries with it of itself no obligation to exercise the right.

Conclusion 15: A person *need* not defend himself against a violation of his right, but may forego its exercise, as long as the right is not a right implied by some moral *obligation* he has.

Conclusion 16: A person always *must* refuse to do a morally wrong act, no matter what the threat, and must try to defend his right not to do it, if possible.

Conclusion 17: A person *may morally* refuse to do what he is coerced into doing, and generally should refuse; but he *may also* yield to the coercion, using the Double Effect.

Conclusion 18: A person may not yield to coercion if the violation of *another person's* right is also involved.

Conclusion 19: We have no right to be treated equally with others.

Conclusion 20: Even though no individual in a given group has a right to some human act, the members of the group *as such* must not be forbidden to perform it, provided it is a human act and there is nothing in their nature as such that prevents them from performing it.

Conclusion 21: We have no right to equality of opportunity.

Conclusion 22: No one has a right to equality of income with anyone else.

Conclusion 23: Even if a person wants to die, he may not morally be killed on the grounds that this was his wish.

Conclusion 24: Every human being has a right to what is necessary to sustain life.

Conclusion 25: If a person is *dying*, then his death *need not be postponed* if the Double Effect applies.

Conclusion 26: If a person is dying and *wishes* not to postpone his death, his wishes must be respected.

Conclusion 27: Abortions are morally wrong except, using the Double Effect, to save the *life* of the mother.

Conclusion 28: The only way a woman can morally be the sexual equal of a man is if *society* brings consequences on the man if he refuses to help the woman he has impregnated and take equal care of the children he has caused to exist.

Conclusion 29: It is morally wrong to deprive a person of some ability he has

because of his genetic potential, either by direct action such as removing the organ that is the faculty in question or by refusing to provide what is *necessary* for him to exercise a function he has by his genetic potential.

Conclusion 30: A human being has an inalienable right to health care.

Section 2: Economics

Conclusion 1: The goal of each human being is a finite complex of activities, reachable in principle, and in general reachable in practice if he should "get the breaks."

Conclusion 2: It is not the automatic tendency of people in transactions to maximize their own gain.

Conclusion 3: A person has the human right to own, not only consumable items, but stable property, which he has the right to pass on to his dependents.

Conclusion 4: A person does not have an automatic right to the fruits of his labor. If he is working on something that someone else already owns, the results of his work are not owned by him.

Conclusion 5: A person acquires ownership of what has not been previously owned simply by asserting a formal claim to it.

Conclusion 6: The right of ownership is not absolute.

Conclusion 7: Great disparities in possessions are not morally wrong, as long as the one with less is not actually being forced into an inhuman existence.

Conclusion 8: When the number of owners and of those dehumanized by lack of possessions becomes very large, it is impossible in practice for individual owners to discharge their obligation toward the needy.

Conclusion 9: On the assumption that government is trying to see to it that the needy are not dehumanized, then when an affluent person has paid his taxes, he has discharged his moral obligation to the needy.

Conclusion 10: If necessities are not involved, there is nothing morally wrong for each party in a transaction to try to gain as much for himself as possible, looking to what he thinks is the upper limit of the value the other party sets on the object he is exchanging.

Conclusion 11: Exchanges involving necessities are always to the disadvantage of the one who receives the necessity.

Conclusion 12: A person who is exchanging a necessity for a value has a right to recover the value of what he is giving up, but no more than this.

Conclusion 13: The price of a product or service, as the compromise between

the buyer-value and the seller-value, does not reflect any value of the object at all.

Conclusion 14: The seller-value is always the value of the seller's *service* (what he gave up to perform it), even if what he is offering for sale is a product.

Conclusion 15: In purchases involving only values, it is perfectly moral to agree on a price that is beyond—even outrageously beyond—the seller's standard of living.

Conclusion 16: A person can determine his standard of living by finding how much money is required for him to be able to achieve his goals. This income level determines his happiness, economically speaking.

Conclusion 17: Money enables a person to choose his service to others, and find something that fulfills his own goals while advancing theirs; and using their money to use other's service to fulfill the rest of his goals.

Conclusion 18: A person providing a necessity has a moral obligation not to become very affluent from his service.

Conclusion 19: A person has no right to receive from others even the minimum necessities of life if it is possible for him to acquire more than the minimum by serving others.

Conclusion 20: It is morally wrong for those buying a service from someone to force him to accept a price so low that all he can do is meet his necessities.

Conclusion 21: Minimum compensation for a service must be above the place where the seller-value actually begins for the person performing the service; but this minimum will be at different levels for different people.

Conclusion 22: The market must be allowed to set prices for values; it cannot morally be used to set prices for necessities.

Conclusion 23: Every firm has at least two coordinate purposes: (a) to serve the public and (b) to make money for the entrepreneur. Neither of these is the means toward the other.

Conclusion 24: It is morally wrong for a firm to misrepresent the service or product it is offering the consumer.

Conclusion 25: Contracts in which one of the parties is to perform a morally wrong act are non-contracts, and laws must be passed to prevent them from being made.

Conclusion 26: The entrepreneur must morally perform the service, even if for some reason it has become very difficult for him to do so; and the consumer must pay for it, even if it becomes very difficult for him to do so.

Section 3: Society

Conclusion 1: Human beings cannot realize their human potential without society; therefore, society is a human necessity.

Conclusion 2: Every society is a system, not a body; it primarily exists for the sake of the members, not the other way round.

Conclusion 3: Every person is to some extent really subordinate to the society.

Conclusion 4: Communities based solely on shared disapproval of certain kinds of conduct or shared dislike of certain kinds of people are perversions of communities, and are morally wrong.

Conclusion 5: No society can exist without cooperative conduct on the part of the members.

Conclusion 6: Every society has a common goal toward which the members cooperate.

Conclusion 7: Every society must try to have the fewest possible laws: only those *necessary* to achieve its common goal.

Conclusion 8: Laws unrelated to the common goal are laws in name only, and in general should not be obeyed. They may be obeyed when the Double Effect applies.

Conclusion 9: An improperly promulgated law is not a law, and need not be "obeyed."

Conclusion 10: In assigning punishment to actual cases, discrimination must be used, so that the least harm will be inflicted consistent with the threat's being maintained for the people who must obey the law.

Conclusion 11: Insofar as a society cannot exist without laws, it cannot exist without authority.

Conclusion 12: No society except a family should regard itself as or be run as a family.

Conclusion 13: Every member has a moral obligation to supply the authority with information he has that is relevant to choices that the society is to make; and the authority has the obligation to open channels of communication from members and take their information into consideration.

Conclusion 14: The person in authority must seek out a small number of wise people to act as advisors, and *defer to their judgment,* not simply rely on his own wisdom. The final decision is to be the *society's,* not his own.

Conclusion 15: The authority is to do as little watching over the society as

possible, consistent with seeing that the laws are obeyed "practically all" the time.

Conclusion 16: It is morally wrong for the police to interfere in the private lives of the members, unless there is *prior evidence* that the person is probably violating a law.

Conclusion 17: If, in the course of investigation for one violation, evidence is uncovered about another, there is nothing morally wrong with using this evidence.

Conclusion 18: No member may morally be forced to testify against himself.

Conclusion 19: It is morally wrong to encourage the members of the society to act as spies on each other.

Conclusion 20: It is morally wrong to tempt a member to disobey a law in order to catch him in the act.

Conclusion 21: It is morally legitimate for the authority to force a person to give up a right when this is the only way to settle disputes involving rights that contradict each other.

Conclusion 22: A constitution is legitimate if there has not been from the beginning a rebellion against it on the part of a significant number of the members.

Conclusion 23: In cases where obeying a law would be contrary to the obvious reason why the law was passed, it is not immoral to disobey.

Conclusion 24: The moral obligation to obey all the laws extends even to foolish ones.

Conclusion 25: Any law that commands a person to do what is contrary to his conscience is not a law and must not be "obeyed."

Conclusion 26: An unjust law must in general be disobeyed; but it may be obeyed when the Double Effect applies.

Conclusion 27: It is morally legitimate for the authority to force a member to testify against another one.

Conclusion 28: Immoral and unjust laws must be changed; the only time when they can be allowed to stand is when by the Double Effect further attempts to change them would only result in something worse.

Conclusion 29: A society may prevent a member from following his conscience, using the Double Effect, when some right of some other member would be violated by his doing so.

Conclusion 30: The public has no "right to know" information about any person in a society, including those in authority or in "public life" unless

that information is *necessary* to enable them to perform some act they have a right to perform.

Section 4: Societies

Conclusion 1: A child has an inalienable right to support *by his biological parents.*

Conclusion 2: It is not that parents should "want" children, but that they must be *willing to accept them and care for them* if they occur from the sex act. Otherwise, it is inconsistent to perform the act.

Conclusion 3: The sex act is *ipso facto* the act of marriage; it contradicts itself if it is done without the willingness to make a long-term commitment to its consequences.

Conclusion 4: No one who has sex with another person can predict that it will not happen that he or the other will become emotionally dependent on the other because of it—and permanently so.

Conclusion 5: It is only in the context of marriage that there is reason to expect that the sex drives of older people can be satisfied.

Conclusion 6: The only way women can be the sexual equals of men is if men are forced by society to take the responsibility for their sexual activity, and sanctions are enforced against sex outside of marriage.

Conclusion 7: homosexuals cannot marry.

Conclusion 8: People who, because of injury or some other reason, cannot perform the sex act, cannot marry.

Conclusion 9: People who are capable of performing the sexual act may marry without ever having sex, if the Double Effect warrants this.

Conclusion 10: Marriage is only dissolved by the death of one of the members of the society. The couple cannot in fact divorce.

Conclusion 11: It is immoral to marry *for the sake of* one's own fulfillment.

Conclusion 12: Marriage as a society presupposes actual love of the partners for each other as a condition for entering it.

Conclusion 13: The love that is presupposed in marriage includes respect for one's own reality, so that one will not be willing to do himself any damage for the sake of the beloved.

Conclusion 14: The "open communication" in a marriage must mean that nothing the other reveals will make a negative difference to him, so that the other partner *can* reveal anything she wants about herself to him and still be loved and accepted. But any attempt to demand or expect

revelation works against openness of communication.

Conclusion 15: Love in marriage involves *absolute acceptance* of the other person for what she really is, not in an attempt to "improve" her.

Conclusion 16: Love in marriage is *willingness to be used* by the other person.

Conclusion 17: Marriage is a *covenant*, not a contract; it is a pledge by each person of a permanent commitment to the other person come what may until death.

Conclusion 18: There is no authority in marriage; neither person has the right to give orders and threaten the other with punishment.

Conclusion 19: The common goal of the family is to provide the conditions for the children's development into full human beings.

Conclusion 20: The transition from childhood to adulthood comes at the point where civil society starts considering what the person is expected to do for the cooperative benefit of all.

Conclusion 21: The family ceases to exist as a society when the last child reaches adulthood.

Conclusion 22: The biological parents by nature have joint authority over their children.

Conclusion 23: Neither parent may morally countermand any order of the other parent, unless that order violates some right of the child.

Conclusion 24: Parents exceed their authority when their commands to a child have nothing to do with the child's development into an adult.

Conclusion 25: Parental authority diminishes gradually as the child grows older and more experienced, until it finally ceases altogether at adulthood.

Conclusion 26: Civil society cannot morally set up roadblocks in the way of parents' educating children according to the parents' conscience.

Conclusion 27: Civil society can have no common goal beyond seeing to it that the members cooperate to prevent dehumanization of any member (the common good).

Conclusion 28: Every person who lives among a number of other people must belong to civil society.

Conclusion 29: Government may not intervene to prevent self-destructive conduct on a citizen's part unless this conduct violates someone else's right. This includes refusing payment for necessities to those who can work but refuse to do so.

Conclusion 30: Government must allow formation of lesser societies inside it, as long as these societies violate no one's rights.

Conclusion 31: The employer's authority over the employee extends only to what is related to the service he has hired the employee for.

Conclusion 32: Once a person hires an employee, he has a certain commitment to him, and cannot fire him frivolously. This commitment grows stronger the longer the employee works for the employer, and hence the more serious must be the reasons for firing him.

Conclusion 33: The employer has the right to impose sanctions on the employee for not following orders. Like all sanctions, these must be the *minimum* necessary to ensure obedience "practically all" of the time.

Conclusion 34: Employers should ask favors of their employees only extremely rarely, and then only in circumstances where it is perfectly obvious that a refusal will not make them suffer in any way.

Conclusion 35: Working conditions and the general atmosphere of the work must be such as to be consistent with human dignity, as far as the nature of the work allows this.

Conclusion 36: As soon as an entrepreneur hires people to work for him, the firm becomes a *society* with three coordinate goals: (a) to provide a service to the consumer, (b) to provide profit for the entrepreneur, and (c) to provide the benefits of employment to the employees.

Conclusion 37: Entrepreneurs must not be solely concerned with maximizing profit when considering hiring employees and providing working conditions for them.

Conclusion 38: The employee in a complex firm is serving two people: the entrepreneur who has hired him, and in cooperation with the entrepreneur, the consumer whom the firm is serving.

Conclusion 39: Unions of employees are legitimate, and must not be hindered. But they are to be used not only to protect the employees from injustices to them, but to pressure employers to see to it that all the goals of the firm are advanced.

Conclusion 40: Entrepreneurs must take great care that, since their service to the firm is a necessity for it, that they do not take advantage of the employees or the consumer by their exorbitant demands.

Conclusion 41: The function of the policy-setting level of management is to see to it that *all three* of the goals of the firm are recognized and promoted, and that the firm is not run simply as a machine for making profit for the investors.

Part Seven: Modes of Development

There are no numbered conclusions in this part, because it is a speculative look at the development of the universe as the result of God's love for it.

Appendix C

Technical Definitions

Abstract: A concept is *abstract* in that it concerns itself with only one relationship within the sensation in question, and deals with only one aspect of the parts related, leaving everything else out of consideration.

Abstraction: *Abstraction* is the act of "picking out" a given concept from a sensation, leaving all other possible relations-aspects not understood in this act.

Affirmation: An *affirmation* is the acceptance of the proposition.

Affluent: A person is *affluent* if his resources enable him to live at a higher scale of living than the majority of people.

Alienable: A right is *alienable* if the possessor may morally give it up and under certain circumstances, it can be morally taken away from him.

Analogous: two things are *analogous* if it is (a) known *that* they are identical or similar, but (b) *the respects in which* they are identical or similar cannot be directly pointed out.

And/or, meaning: *The meaning of "and/or" is* that the possibilities referred to are connected in such a way that one of them is in fact realized, though which is realized is not expressed by the statement.

And, meaning: *The meaning of "and" is* that the two facts affirmed are connected somehow; but it does not specify what the connection is.

And/or, logical function: *The logical function of "and/or" is* that at least one of the component propositions must be affirmed.

And, logical function: *The logical function of "and" is* that each of the component propositions is to be affirmed.

Angle: The *angle* is the combined distances of many objects to a given object.

Animal: An *animal* is a living body whose soul is immaterial.

Argument: An *argument* is a logical inference.

Authority: *Authority* is the status in society which has the right to make laws, to see that they are kept, to impose sanctions on violations, and to decide disputes among members. The person or persons in that status are referred to as "the authority" or "the authorities."

Authority: *Authority* is the status in society which has the right to issue commands and laws.

Bad, morally: An act or a choice is *morally bad or evil* if it fails to live up to the evaluator's ideal for human activities.

Bad: An object or fact is *bad* or has something wrong with it when it disagrees with my ideal of what it ought to be.

Bankrupt: A person or firm is *bankrupt* if he or it is legally permitted to perform only a fraction of his obligations toward others.

Beauty: *Beauty* is an esthetic property one expects to find in an object.

Behavior, human: *Human behavior* is any overt act that a human being chooses to perform. That is, it is any act that a human being can either perform or not perform by choosing one way or the other: an act under the control of choice.

Being, real: *Real being* is being as a causer or condition of a perception.

Being: *Being* is either (1) God, the infinite existence; (2) a finite existence; or (3) some unified combination of finite existences.

Being affected: *Being affected* is the relation the effect has to its cause.

Being: *being* is the causer of a way of consciousness as "formed consciousness."

Being, possible: *Possible being* deals with imagining, and is the fact that there is no contradiction in supposing that an image like this could be a perception.

Body: A *body* is a system whose unity predominates over its multiplicity.

Business: A *firm* or *business* is a social entity which offers a service or product to the public.

Causality: *causality* of a cause is the cause's relation to its effect.

Cause: the *cause* of a given effect is *all and only* what is *necessary* to explain the effect.

Causer: the *causer* is the concrete object that is "doing the causing"; it is the concrete thing that contains the cause as an abstract aspect of itself.

Certainty, absolute: *Absolute certainty* only occurs when the denial of something implies its assertion.

Certainty, moral: *moral certainty* really means that you simply have no reason to suspect that you are mistaken,

Certainty, physical: "physical certainty" is the level of certainty in which you can't prove it's *impossible* for you to be mistaken, but where you know that *in fact you aren't* mistaken.

Certainty, objective: *objective* certainty, which can give the *factual* grounds for knowing (i.e., the evidence) that you aren't mistaken.

Certainty: *certainty* is the knowledge that what one thinks is true is not mistaken;

Change, accidental: An *accidental* change is a change in which the body afterwards, while different, is still the same kind of body.

Change: A *change* is an act by which one and the same thing becomes different from itself.

Change, substantial: A *substantial* change is a change in which the body afterwards is a different kind of body.

Citizen, fullest sense: A *citizen* in the fullest sense of the term is any adult who was born into the society and has not become a citizen of some other country.

Citizen: A *citizen* is a member of civil society.

Coercion: *Coercion* is the use of moral force which violates a right of the one forced.

Command, unjust: An *unjust law or command* commands a person to do what he has a right not to do, even though it is not morally wrong for him not to do it.

Command: A *command* expresses a desire that someone perform an act.

Command, immoral: An *immoral law or command* commands a person to do what is morally wrong (or against his conscience).

Command: A *Command* is an assignment, with a sanction attached, of a task to be performed.

Communicate: A linguistic expression *communicates* what could reasonably be expected to be understood from it.

Communication, linguistic: *Linguistic communication* is the representation to others in sensible ways of one's mental acts.

Communication, factual: *Factual communication* is the representation to others in sensible ways of what one thinks the facts are.

Community: A *community* is a set of people who have common interests and/or concerns, and share them with each other.

Compensation: *Compensation* is the value exchanged for the service.

Concept: The *concept* is the relation *as* understood.

Concept, esthetic: *Esthetic concepts* are potential relationships among objects based on relationships among emotions as their effects on us.

Concept: A *concept* is the form of the act of understanding as such; it is the

relationship-aspect understood.

Conclusion: A *conclusion* is a proposition whose affirmation or denial depends on an inference.

Condition: a *condition* is the cause of a cause.

Conduct, human: *Human conduct* is human behavior looked at from a moral point of view, as to whether the behavior is consistent or inconsistent with being a human being.

Conscience: *Conscience* is the factual information a person has at the time he makes a choice about the moral rightness or wrongness of the act he is about to choose.

Conscience, clear: A *clear conscience* has no information that the act in question might be morally wrong.

Conscience, unclear: An *unclear conscience* has some evidence that the act in question might in fact be wrong, even if that evidence is weak.

Conscious: An act is *conscious* if the being in question is conscious of being conscious.

Conscious:A *conscious* act is an act that contains the whole of itself within itself; or it is an act that reacts directly and completely to itself.

Consciousness, empty: *Empty consciousness* is understanding's awareness of itself when it has deliberately refused to know any relationship.

Constitution: The *constitution* of a society is the form the authority has in that society.

Consumer: A *consumer* or *customer* is one of the public.

Converse: The *converse* of a proposition is the conclusion that results from conversion.

Conversion: *Conversion* is the logical inference involved in interchanging the subject and predicate of a proposition.

Cooperation: *Cooperation* is the fact that each member of a society does something that benefits the other members more than himself, and does so in such a way that what he does is predictable by the other members.

Copula: *The copula* is the present indicative active of "to be" used as a "link" between the subject and the predicate.

Cost: The *cost* of something is what is given up to get it.

Culture: A *culture* is a community insofar as it has expectations for the conduct of the members.

Culture of a community: The *culture of a community* is the collective mental attitudes and level of understanding of that community.

Culture, absolute use: *"Culture"* taken absolutely is the set of mental attitudes that characterize the culture of the highest class of people.

Customer: A *consumer* or *customer* is one of the public.

Damage: *Damage* is some contradiction of the person's present reality.

Dehumanization: *Dehumanization* is being forced to do less than what is implied in one's human genetic potential as human.

Demand: The *demand* for the product or service is the number instances of it that buyers will buy at a given price.

Denial: A *denial* is the rejection of the proposition.

Determined: An act is *determined* if it is not possible (for whatever reason) for it to be anything but some given act.

Direction: *Direction* means a change insofar as it is going from instability to equilibrium.

Disappointment: *Disappointment* is either emotional dissatisfaction, or the knowledge that one's ideals are not realized.

Distance, abstract real: The *abstract real distance* from one body to another is the *causality* (the force) one exerts on the other, assuming a "unit source" and a "unit affected object"; or it is the force of the field as a field.

Distance, real: The *real distance* from one body to another is the force that that body's field is exerting on the other.

Doubt: *doubt,* which is the state of mind where one thinks that he might be mistaken.

Economic activity: *Economic activity* is engaging in transactions to be able to perform essential acts or achieve one's goals.

Economic system: An *economic system* is a system of interaction, organized in such a way that the subordination of one person's own reality to the goals of another person is compensated for by receiving the ability to subordinate others' reality to his own goals.

Effect: An *effect* is the set of all information—and only that information—*directly relevant* to an apparently contradictory situation.

Effect: what is affected: *What is affected* is the concrete object or set of objects that contain the effect, but which have additional properties *not relevant* to the effect as such.

Either/or, logical function: *The logical function of "either/or" is* that one of the components must be affirmed and the other one denied.

Either/or, meaning: *The meaning of "either/or" is* that the two facts referred to contradict each other.

Elastic: Supply or demand is *elastic* if it changes when the price changes.

Element: An *element* is one of the multiplicity that makes up a system.

Employee: An *employee* is a person who puts his service under the authority of someone else.

Employer: An *employer* is a person who hires another person to work under his authority.

Energy: *Energy* is any activity that is limited quantitatively

Enjoyment: *Enjoyment* is either emotional satisfaction, or the knowledge that one's ideals are realized.

Enthymeme: An *enthymeme* is a syllogism with one proposition not explicitly stated.

Entrepreneur: An *entrepreneur* is a person who offers a service or product to the public.

Equilibrium: *Equilibrium* is the condition of a body in which its unifying energy has the quantity that it can exist with.

Equilibrium, biological: *Biological equilibrium* is an energy level above that of ground-state equilibrium, which the living body maintains by nutrition.

Error: A *judgment* is *mistaken* or *in error* when the fact as understood differs from the actual fact.

Essence: *Essence* is the cause of each "formed consciousness" as this case and no other, and therefore as different from any other "formed consciousness."

Essential, more: A relatively essential act is *more essential* if the dehumanization implied in its deprivation is greater.

Essential: An *essential act* is one without which a human being cannot be human.

Essential, absolutely: An *absolutely essential act* is one which, if not performed, results in death.

Essential, relatively: A *relatively essential act* is one by which, if it is unable to be performed, the person is dehumanized.

Evaluation: *Evaluation* is the judgment of whether the facts conform to the ideal or not.

Evidence: the *evidence* for some fact is *a known effect whose cause is that fact.*

Evil, morally: A person is *morally evil* when he acts inconsistently with the reality which he is.

Evil, ontological: *Ontological evil* is limitation greater than the lowest limitation that we consider "normal."

Evil, moral: An act or a choice is *morally bad or evil* if it fails to live up to the evaluator's ideal for human activities.

Exclamation: An *exclamation* expresses an emotional attitude toward something.

Existence: *Existence* is the cause of each "formed consciousness" as "formed consciousness" and therefore as the same as any other "formed consciousness."

Existence: *existence* is the cause of a way of consciousness as "formed consciousness."

Explanation: to *explain* is to state as a possible fact something which *makes some other set of facts not a real contradiction*.

Expression, linguistic: *Linguistic expression* is the representation in sensible ways of mental acts.

Fact, esthetic: *An esthetic fact* is a fact understood by esthetic understanding.

Fact, perceptive: *A perceptive fact* is a fact understood by perceptive understanding.

Fact: A *fact* is existences as related.

Faculty: A *faculty* is a part of the body organized with a sub-unifying energy such that its instabilities and recovery from them provide the living body with its living properties and allow it to control them.

Fallacy, material: *The "material fallacy"* is the fallacy of considering the parts (the material) as what is primarily the body; what makes the body what it is is its unification, not the parts or what it is "made of."

False: A statement is *false* if it does not agree with the fact it states (i.e. if the fact isn't what the statement says it is).

Field: A *field* is a form of energy which simultaneously possesses an infinity of quantities, any one of which defines some definite aspect of the field.

Finite: the finite is *(a) That which is different from itself,* or *(b) That which contains what is not itself within it as not different from itself,* or *(c) That which leaves some of itself outside itself,* or *(d) That which is less than what it is to be itself*.

Firm: A *firm* or *business* is a social entity which offers a service or product to the public.

Follow: The conclusion is said to *"follow from"* the premises.

Force, moral: *Moral force* is the threat of some kind of damage if some act is not done or avoided.

Form, logical: *Logical form* is the form into which a statement is cast to make

it a proposition easily operated on in logic.

Form of existence:The *form of existence* is the analogy among existences by which they fall into groups of existences similar among themselves and different from others.

Free: A person is *free* if he is not constrained by a threat.

Free: A person or animal is *free* if its acts are spontaneous, and not constrained or determined from outside.

Freedom of choice: *Freedom of choice* means that the weight of the influences does not determine the choice.

Frustration: *Frustration* is the knowledge that one has as a goal something that cannot be achieved.

Function, logical: The *logical function* of a connective combining statements (or propositions) is the indication of what is to be done with the statements connected.

Goal, common: The *common goal* of a society is the purpose for which the members are cooperating.

God: *God* is the non-finite existence.

Good: An object or fact is *good* when in fact it conforms to my ideal of what it ought to be.

Good, common: The *common good* of a society is the rights of the members which have not been freely given up upon entering the society.

Good, morally: An act or a choice is *morally good* if it lives up to the ideal a person has for human activities or human choices.

Government: *Government* is the authority of civil society.

Growth: *Growth* is the process by which the living body goes from its initial instability as living to its mature state.

Guilty: A person is *guilty* when he has chosen to do what is morally wrong or illegal.

Guilty, morally: A person is *morally guilty* when he has chosen to do what he knows or suspects is a morally wrong act, whether or not it happens.

Guilty, legally: A person is *legally guilty* when he is legally responsible for an act violating a law.

Habit: A *habit* is an automatic stimulus-response pattern that is not innate, but acquired through repetition of the same act on being presented with the same stimulus.

Happiness: *Happiness* is the factual knowledge of being successful.

Healthy: A living being is *healthy* if it can do all that is in its genetic potential

to do.

Humor: *Humor* is the understanding that some fact about the world doesn't make sense, together with a refusal either to treat it as a problem or to evaluate it.

Idea: The term *idea* is vague, meaning primarily *a concept*; but it can also mean *a judgment*, or even, in some contexts, *a sensation*.

Ideal: *an ideal* is a mental construct against which *the facts* are judged.

If then, logical function: The *logical function of "if then"* is that *an affirmation of the antecedent* (the contents of the "if" clause) *demands an affirmation of the consequent* (the contents of the "then" clause), *and a denial of the consequent demands a denial of the antecedent.*

If then, meaning: The *meaning of "if then"* is that *the consequent depends somehow on the antecedent.*

Immaterial: An *immaterial* act is an act which is in itself spiritual, but cannot act unless it also "reduplicates" itself as a form of energy or system of energies.

Immoral: A *choice* is *immoral* if it is a choice to do an act for which there is any factual evidence of its moral wrongness.

Immoral: The *choice* to perform an act is *immoral* if the agent has any evidence which would indicate that the act is morally wrong.

Implication: *Implication* is the relation of premises to the conclusion.

Imply: Premises are said to *"imply"* the conclusion.

Important, more: One goal is *more important* than another if the other will be given up or postponed in order to achieve it.

Inalienable, relatively: A right is *relatively inalienable* if the possessor may morally give it up if he wishes, but no one, not even civil society, may morally force him to give it up.

Inalienable, absolutely: A right is *absolutely inalienable* if the possessor may not morally give it up. No one, of course, may take it away, either.

Inanimate: An *inanimate body* is a body in which the *quantity* of the unifying energy has a determining role in what it is.

Indigent: A person is *needy* or *indigent* if his resources will not allow him to escape from being dehumanized.

Inelastic: Supply or demand is *inelastic* if it remains the same when the price changes.

Inference: An *inference* is an arrangement of propositions such that the conclusion cannot be denied without either denying the premises or declaring

the logic invalid

Influenced: An act is *influenced* if something made it probable that the act would be performed.

Instability: *Instability* is the condition in which the unifying energy has a quantity that it cannot exist with in that form.

Invalid: An inference is *invalid* if the conclusion can be denied without denying any premise.

Is incompatible with, logical function: *The logical function of "is incompatible with" is* that at least one of the components must be denied.

Is incompatible with, meaning: *The meaning of "is incompatible with" is* that the facts stated in the components are incompatible with one another.

Judgment: the *judgment* is the act of understanding *as* understanding a fact.

Judgment: A *judgment* is the complete act of understanding, containing not only the relationship, but the conscious "dimension" of the sensation as well as the consciousness of the self.

Justice, commutative: *Commutative justice* is the virtue of not violating the rights of others.

Justice: *Justice* is the virtue of fitting one's action to the reality of the other people affected by it.

Justice, distributive: *Distributive justice* is the virtue of exacting cooperative acts from those whose cooperation inconveniences them least, and giving to those who need the society's help most.

Justice, retributive: *Retributive justice* is the virtue of imposing a penalty on a violator, consistently with its being the least harmful one in his situation which will still preserve the sanction.

Labor: *Labor* is activity which transforms some material object into something of value or of greater value to people.

Language: A *language* is an ordered system of words.

Law, unjust: An *unjust law or command* commands a person to do what he has a right not to do, even though it is not morally wrong for him not to do it.

Law: A *law* is an assignment, with a sanction attached, of a role to a certain status in the society.

Law, immoral: An *immoral law or command* commands a person to do what is morally wrong (or against his conscience).

Law, scientific: *A scientific law* is a description of some invariant relationship.

Leadership: *Leadership* is the ability to persuade others to do what one thinks

is the best course of action for them.

Length: The *length* of a process is the difference in energy level between the initial instability and the final equilibrium.

Life: *Life* is the activity of a living body as living.

Life: *Life* is existence insofar as it is in control of itself.

Limitation, formal: a limitation is *formal* when it is a *qualitative* limitation, and not one to which numbers apply meaningfully.

Logic, formal: *Formal logic* is the arrangement of statements in such a way that it is understood that the final statement cannot be denied without contradicting what has already been said.

Malfeasance: *Malfeasance* consists in performing the agreed-on service badly.

Market: The *market* for any product or service is the set of all buyers who want to buy that product or service and the set of all sellers who offer it.

Marriage: *Marriage* is the society which provides the conditions for being able to use the sexual faculty consistently with itself.

Mass: The *mass* of a body is the property of the body by which it acts gravitationally.

Mathematics: *Mathematics* is the science of relationships and the related as such.

Meaning: The *meaning* of a sentence or word is the act of understanding that it is calculated to awaken in the hearer's or reader's mind.

Meaning of a linguistic expression: The *meaning of a linguistic expression* is the mental act it stands for.

Meaning of a connective: The *meaning* of a connective is how the facts stated by the statements are interrelated.

Member: A *member* is one of the multiplicity that make up the set.

Mind: the *mind* is the cause which explains how multiplicity in consciousness can be one single consciousness.

Misfeasance: *Misfeasance* consists in doing something other than what was agreed on.

Mistaken: A *judgment* is *mistaken* or *in error* when the fact as understood differs from the actual fact.

Mode: A *mode* of the finiteness of something is something about the finiteness of something by which it is analogous to only some other finite existences.

Money: *Money* is a certain amount of freedom to use others' freely offered services to fill one's necessities or make progress toward one's goals, recognizable universally as this amount of this type of freedom.

Moral: The *choice* to perform an act is *moral* if the act to be chosen is thought to be consistent with the agent.

Moral: A *choice* is *moral* if it is a choice to do an act known to be morally right. In order for a choice to be moral, there must be no *evidence* that it is wrong.

Motivation: The *motivation* for an act is anything that inclined the act in that direction.

Motive: The *motive* of the choice is the goal chosen for the act.

Mutilation: *Mutilation* is the removal or damaging of a part of the body in such a way that the person becomes unable to do what he could do with the intact part.

Nature of a substance: *The nature of a substance* is the body insofar as it performs properties of the substance.

Nature: *The nature* of a body is the body insofar as it performs or can perform a property.

Nature of a body: *The nature of an individual body* is the body insofar as it performs any act of that body.

Necessity: A *necessity* is a means toward an essential act.

Necessity, absolute: An *absolute necessity* is that without which a person dies.

Necessity, relative: A *relative necessity* is that without which a person is dehumanized.

Necessity, greater: A relative necessity is *a greater necessity* if it leads to a more essential act.

Needy: A person is *needy* or *indigent* if his resources will not allow him to escape from being dehumanized.

Nonfeasance: *Nonfeasance* consists in not performing the service agreed on.

Numbers, beautiful: The *beautiful numbers* are the number system that includes the real numbers, the imaginary numbers, and the philosophical numbers.

Numbers, philosophical: The *philosophical numbers* are the numbers entered into by dividing zero by zero when that is defined or in general by following the rules of the differential calculus.

Nutrition: *Nutrition* is the act of taking into the body energy and other bodies, breaking up those other bodies, and integrating some of their energy and parts into the body.

Obey: To *obey* is to perform a task commanded.

Observation: *observation*. What "observation" in this scientific sense means is

noticing all the aspects of what is affected that are relevant to the effect in question, and removing from consideration all aspects that are not part of the effect.

Obverse: The *obverse* is the conclusion of an obversion.

Obversion: *Obversion* is the logical inference involved in changing the copula from affirmative to negative or vice versa.

Opinion: We have an *opinion* instead of knowledge, then, in one of two situations: either (1) we don't have any particular evidence for thinking that X is a fact, but it "stands to reason," and there isn't any evidence we know of against it, or (2) we know that there is evidence for saying that X is a fact *and* evidence for saying that X is *not* a fact; but the evidence on one side seems to be stronger.

Ownership: *Ownership* of an object is placing the object in a situation in which a person (the owner) can do what he pleases with the object, and no one else can do anything to or with it except what the owner allows.

Part: A *part* is one of the multiplicity in the body.

Path: The *path* of the process is the process considered as a number of smaller processes added together.

Perception: A *perception* is a complex unity of external sensations.

Person: A *person* is a self as related to other selves.

Place: The *place* of a body is its positions with respect to the other bodies around it.

Play: *Play* is activity undertaken for its own sake.

Poor: A person is *poor* if his resources will not allow him fully to achieve his standard of living.

Position, real abstract: *Real abstract position* will be the tendency to change of "unit objects," abstracting from anything but the fields as such.

Position, real: *Real position* is the actual tendency to change based on the actual force and the object's actual tendency to respond to the force.

Position: The *position* of a body is its being-affected by some other body's field.

Postpone death: What *postpones death* is what is needed to keep a person alive only if he is in the process of dying.

Potential: The *potential* of a field is one of the quantities of its energy.

Poverty level: The *poverty level* of a given culture is that level of financial resources such that below it the person does not have the minimum ability to choose that "everyone" in the culture has.

Practical activity: *Practical activity* is use of things to be able to perform essential acts or achieve one's goals.

Predicate: *The predicate* of the proposition is the term that expresses the proposition's meaning.

Premise, subject: The *subject premise* is the premise that contains what will be the subject of the conclusion, *whether this term is the subject of its premise or not*.

Premise, predicate: The *predicate premise* is the premise containing what will be the predicate of the conclusion *whether it is the predicate of its premise or not*.

Premise: A *premise* is a proposition from which a conclusion is drawn.

Price: The *price* is the compromise between the buyer-value and the seller-value.

Price: The *price* of something is what is exchanged for it.

Principle of Identity states that what is is what it is.

Principle of Contradiction says that contradictions can be *stated*, but that these "statements" don't mean anything or refer to anything. In reference to statements, then, the Principle says that any meaningful statement cannot be both true and false (if the words are taken in exactly the same sense both times).

Principle of the Excluded Middle states that there is no middle ground between being and not being; or in other words, statements cannot be *neither* true nor false

Privilege: A *privilege* is the granting of some power as if the person had the right to perform the act in question, when in fact he does not have title to that right.

Process: *Process* is the act by which an unstable body regains its equilibrium.

Process: *process* is a change as a property of some body.

Production: *Production* is the transformation of a material object into something of value or of greater value to people.

Profit: *Profit* is that part of the price the entrepreneur receives that is beyond compensation for his costs.

Promulgation: *Promulgation* is a formal act making it possible for the people to understand (a) what they must do, and (b) that they must do it.

Property: A *property* is a way a body acts as a whole: i.e. as these parts with this unifying energy.

Property, intrinsic: An *intrinsic* property is a property that the body has as not reacting to some activity acting on it.

Property of a body: A *property of a body* is an act it performs because it is the individual body which it is.

Property of a substance: A *property of a substance* is an act of a body because it is the kind of body which it is.

Property, reactive: A *reactive* property is a property that the body performs when reacting to some activity acting on it.

Proposition, affirmative, negative: The *proposition is affirmative or negative* depending on whether the copula is affirmative or negative.

Proposition, definite, indefinite: The *proposition* is called *definite* or *indefinite* depending on whether its *subject* is definite or indefinite.

Proposition: A *proposition* is a statement of fact "proposed for the sake of the argument" in a logical inference.

Public: The *public* is the set of people who might find the service of product of value to them or necessary for them.

Punishment: *Punishment* is some harm that the society will do to the person if he does not perform the task assigned.

Purpose: *Purpose* is the equilibrium that a change is directed towards.

Quantity: *Quantity* is the mode of finiteness by which numbers apply to activities.

Question: A *question* expresses a desire to be informed, or puzzlement.

Reasoning, refutational mode: The *refutational mode* of reasoning affirms or denies each of the components and concludes to the affirmation or denial of the compound.

Reasoning, inferential mode: The *inferential mode* of reasoning affirms the compound and affirms or denies one of its components, and concludes to the affirmation or denial of the other.

Responsibility: *Responsibility* is the fact that the act and its consequences "belong to" the person insofar as his choice could have made them different.

Responsibility, physical: *Physical responsibility* is the responsibility a person has for an event because it was in principle possible for him to prevent it by choosing differently.

Responsibility, moral: *Moral responsibility* implies that the act and its effects were *known* when you made the choice and you were *willing* to have them happen.

Responsibility, legal: A person is *legally responsible* for what the "ordinary person" would be morally responsible for in the same circumstances.

Rhetoric: *Rhetoric* is the use of esthetically understood facts to lead people to action.

Rich: A person is *rich* or *wealthy* if his resources are greater than what will enable him to live according to his standard of living.

Right: A *right* is a moral power to do something.

Right, morally: An *act* (i.e. an instance of conduct) is *morally right* if it is consistent with the reality of the agent.

Right, morally: An *act* is *morally right* if it is in fact consistent with the agent.

Role: The *role* a member has in a society is the cooperative action he is expected to perform by the other members.

Sanction: A *sanction* is a threat of punishment attached to an assigned task in a society, making it more disadvantageous not to perform the task than to perform it.

Scale of living: A person's *scale of living* is the type of life his resources will allow him to live.

Self: the *self* is the causer of a unified multiplicity of consciousnesses.

Self: A *self* is a being which possesses itself, and makes itself be what it is.

Sensation: *Sensation* is an act of consciousness which is (a) spiritual, but (b) in one or more of its "reduplications" of itself does so as one or more forms of energy, each with a quantity.

Sensation, external: An *external sensation* is the aspect of a perception which reacts to a single activity or aspect of an object.

Service: A *service* is an action of value or necessity to another person, performed in exchange for a value or necessity.

Set: A *set* is any multiplicity that is experienced as or considered as a unit.

Shape: The *shape* of a body is its internal field with the parts in position in that field.

Size: The *size* of a body is the distance between its outermost parts.

Society, totalitarian: A *totalitarian society* is a society organized on the premise that the members exist for the society primarily, and the society for the members only accidentally.

Society, civil: *Civil society* is the society whose common goal is the common good of the members.

Sorites: A *sorites* is a chaining of several syllogisms or enthymemes.

Soul: The *soul* is the form of the unifying energy of a living body.

Soul: *Soul* will often be used in a looser sense as meaning life as limited in the way in question.

Sound: An inference is *sound* when the premises are factually true statements, and they generate a conclusion which cannot be factually false. Otherwise, the inference is *unsound*, even if the conclusion happens to be true.

Space, around: *The space around an object* is its field.

Space: *Space* taken absolutely is in reality simply the sum of all positions.

Speculation: *Speculation* is thinking of an explanation for an effect.

Spiritual: A *spiritual activity* is an act that is not limited quantitatively; consequently, it is either God (absolutely unlimited) or a "pure" (unlimited) *form* of activity.

Standard of living: A person's *standard of living* is the resources needed to live the type of life he chooses as "really his."

Statement: A *statement* expresses an act of understanding (a judgment); and consequently what the speaker thinks is a fact.

Status: The *status* in a society is the position in the society that has a definite role attached to it, irrespective of who in fact is in that position.

Subject of a proposition: *The subject* of the proposition is the term that refers to a class of objects.

Substance: A *substance* is a kind of body.

Success: *Success* is the actual achieving of one's goals.

Supply: The *supply* of the product or service is the number of instances of it that are offered at a given price.

Supposition: The *supposition* of a word is one of the "dimensions" of the polymorphous concept it stands for.

Sustain life: What *sustains life* is what everyone always needs in order to stay alive, such as air, food, and water.

Syllogism: A *syllogism* is an inference with two premises.

System: A *system* is a multiplicity that acts in some way as a unit.

Temptation, moral: A *moral temptation* is any reason or emotion that would make it seem a good thing to do what is known or suspected to be morally wrong.

Term, indefinite: An *indefinite* term is a term in which the objects are known only in relation to the class they belong to.

Term, middle: The *middle term* is the term that does not appear in the conclusion.

Term, definite: A *definite* term is a term in which the objects referred to can

in principle be designated.

Term, subject: The *subject term* is the term that is to be the *subject of the conclusion*.

Term, predicate: The *predicate term* is the term that is to be the *predicate of the conclusion*.

Term: A *term* is a word or group of words which functions grammatically as a noun.

Threat: A *threat* is a promise of harm if some act is (or is not) performed.

Time: *Time* as *that which measures processes* is the length of a process with a standard, constant velocity, used to measure the time (in the previous sense) of another process.

Time of a process:The *time of a given process* is the ratio between its length and its velocity.

Title: The *title* to a right is the aspect of the person which would be contradicted if the action were prevented.

True: A *judgment* is *true* when the fact as understood is actually the fact.

True: A statement is *true* if it agrees with the fact (i.e. if it says that the fact is what in fact it is).

Ugliness: *Ugliness* is the lack in an object of an expected esthetic property.

Understanding, esthetic: *Esthetic understanding* is understanding that uses emotions and/or the emotional overtones of perceptions or images as the *termini* of the relationships it understands.

Understanding, perceptive: *Perceptive understanding* is understanding that uses perceptions and/or images as the *termini* of the relationships it understands.

Understanding: *Understanding* is the act by which we are conscious of what the relationship is among parts of a given sensation.

Understanding: *Understanding* is the act of consciousness by which we know the relationships among our perceptions or images and, if they are perceptions, therefore among the objects that caused them.

Unhealthy: A living being is *unhealthy* if something within it prevents it from doing what it is genetically capable of doing.

Universal: A concept or word is *universal* if it applies to an infinity of possible objects (all the objects with the aspect in question).

Valid: An inference is *valid* if the conclusion cannot be denied without denying at least one of the premises.

Valid: An inference is *valid* when, *if* the premises are true, the conclusion

cannot not be false.

Valuable, more: One object or act is *more valuable* than another if it leads to a more important goal.

Value, seller: The *seller-value* of a product or service is the value of the act or object from the point of view of the one who performs the act or gives up the object.

Value, buyer: The *buyer-value* of a product or service is the value of the act or object from the point of view of the one who receives it.

Value, potential: A *potential value* is some aspect of an object that in fact leads to some human activity.

Value: The *value* of any object or act is that aspect of it by which it can lead to a chosen goal.

Velocity: The *velocity* of the process is the quantity of the process as an act.

Vice: A *vice* is a bad habit.

Vice, moral: A *moral vice* is the habit of doing something morally wrong.

Virtue: A *virtue* is a good habit.

Virtue, moral: A *moral virtue* is the habit of doing something morally right.

Vocation: A *vocation* is an inclination toward something that does not carry an imperative along with it.

Wealthy: A person is *rich* or *wealthy* if his resources are greater than what will enable him to live according to his standard of living.

Well-off: A person is *"well off"* if his resources are enough to enable him to live according to his standard of living.

Word: A *word* is a sensation that represents a mental act.

Work: *Work* is activity pursuant to a goal one has chosen.

Worship: *Worship* is the act of acknowledging absolute dependence on another.

Wrong, morally: An *act* is *morally wrong* if it is inconsistent with the reality of the agent.

Wrong, morally: The *act* is *morally wrong* if it in fact contradicts the agent in some way.