Christian Worldview and Social Issues

Biblical Principles

How can we apply a Christian worldview to social and political issues? I would like to set forth some key biblical principles that we can apply to these issues.

A key biblical principle that applies to the area of bioethics is the sanctity of human life. Such verses as Psalm 139:13-16 show that God's care and concern extends to the womb. Other verses such as Jeremiah 1:5, Judges 13:7-8, Psalm 51:5 and Exodus 21:22–25 give additional perspective and framework to this principle. These principles can be applied to issues ranging from <u>abortion</u> to <u>stem cell research</u> to <u>infanticide</u>.

A related biblical principle involves the equality of human beings. The Bible teaches that God has made "of one blood all nations of men" (Acts 17:26). The Bible also teaches that it is wrong for a Christian to have feelings of superiority (Phil. 2). Believers are told not to make class distinctions between various people (James 2). Paul teaches the spiritual equality of all people in Christ (Gal. 3:28; Col. 3:11). These principles apply to <u>racial relations</u> and <u>our view of</u> <u>government</u>.

A third principle is a biblical perspective on marriage. Marriage is God's plan and provides intimate companionship for life (Gen. 2:18). Marriage provides a context for the procreation and nurture of children (Eph. 6:1-2). And finally, marriage provides a godly outlet for sexual desire (1 Cor. 7:2). These principles can be applied to such diverse issues as artificial reproduction (which often introduces a third party into the pregnancy) and <u>cohabitation</u> (living together). Another biblical principle involves sexual ethics. The Bible teaches that sex is to be within the bounds of marriage, as a man and the woman become one flesh (Eph. 5:31). Paul teaches that we should "avoid sexual immorality" and learn to control our own body in a way that is "holy and honorable" (1 Thess. 4:3-5). He admonishes us to flee sexual immorality (1 Cor. 6:18). These principles apply to such issues as premarital sex, adultery, and homosexuality.

A final principle concerns government and our obedience to civil authority. Government is ordained by God (Rom.13:1-7). We are to render service and obedience to the government (Matt. 22:21) and submit to civil authority (1 Pet. 2:13-17). Even though we are to obey government, there may be certain times when we might be forced to obey God rather than men (Acts 5:29). These principles apply to issues such as war, civil disobedience, politics, and government.

Communicating in a Secular Culture

How can we communicate biblical morality effectively to a secular culture? Here are a few principles.

First, we must interpret Scripture properly. Too often, Christians have passed off their sociological preferences (on issues like abortion or homosexual behavior) instead of doing proper biblical exegesis. The result has often been *a priori* conclusions buttressed with improper proof-texting.

In areas where the Bible clearly speaks, we should exercise our prophetic voice as we seek to be salt and light (Matt. 5:13-16). In other areas, concessions should be allowed.

The apostle Paul recognized that the first priority of Christians is to preach the gospel. He refused to allow various distinctions to hamper his effectiveness, and he tried to "become all things to all men" that he might save some (1 Cor. 9:22). Christians must stand firm for biblical truth, yet also recognize the greater need for the unsaved person to hear a loving presentation of the gospel.

Second, Christians should carefully develop biblical principles which can be applied to contemporary social and medical issues. Christians often jump immediately from biblical passages into political and social programs. They wrongly neglect the important intermediate step of applying biblical principles within a particular social and cultural situation.

Third, Christians should articulate the moral teachings of Scripture in ways that are meaningful in a pluralistic society. Philosophical principles like the "right to life" or "the dangers of promiscuity" can be appealed to as part of common grace. Scientific, social, legal, and ethical considerations can be useful in arguing for biblical principles in a secular culture.

Christians can argue in a public arena against abortion on the basis of scientific and legal evidence. Medical advances in embryology and fetology show that human life exists in the womb. A legal analysis of the Supreme Court's *Roe v. Wade* decision shows the justices violated a standard principle of jurisprudence. The burden of proof is placed on the life-taker and the benefit of the doubt is given to the life-saver.

This does not mean we should sublimate the biblical message. But our effectiveness in the public arena will be improved if we elaborate the scientific, social, legal, and ethical aspects of a particular issue instead of trying to articulate our case on Scripture alone.

Christians should develop effective ways to communicate biblical morality to our secular culture. Law and public policy should be based upon biblical morality which results from an accurate interpretation of Scripture and a careful application to society.

Christian Principles in Social Action

How should Christians be involved in the social and political arena? Here are a few key principles.

First, Christians must remember that they have a dual citizenship. On the one hand, their citizenship is in heaven and not on earth (Phil. 3:17–21). Christians must remind themselves that God is sovereign over human affairs even when circumstances look dark and discouraging. On the other hand, the Bible also teaches that Christians are citizens of this earth (Matt. 22:15–22). They are to obey government (Rom.13:1–7) and work within the social and political circumstances to affect change. Christians are to pray for those in authority (1 Tim. 2:1–4) and to obey those in authority.

Jesus compared the kingdom of heaven to leaven hidden in three pecks of meal (Matt.13:33). The meal represents the world, and the leaven represents the Christian presence in it. We are to exercise our influence within society, seeking to bring about change that way. Though the Christian presence may seem as insignificant as leaven in meal, nevertheless we are to bring about the same profound change.

Second, Christians must remember that God is sovereign. As the Sovereign over the nations, He bestows power on whom He wishes (Dan. 4:17), and He can turn the heart of a king wherever He wishes (Prov.21:1).

Third, Christians must use their specific gifts within the social and political arenas. Christians have different gifts and ministries (1 Cor. 12:4–6). Some may be called to a higher level of political participation than others (e.g., a candidate for school board or for Congress). All have a responsibility to be involved in society, but some are called to a higher level of social service, such as a social worker or crisis pregnancy center worker. Christians must recognize

the diversity of gifts and encourage fellow believers to use their individual gifts for the greatest impact.

Fourth, Christians should channel their social and political activity through the church. Christians need to be accountable to each other, especially as they seek to make an impact on society. Wise leadership can prevent zealous evangelical Christians from repeating mistakes made in previous decades by other Christians.

The local church should also provide a context for compassionate social service. In the New Testament, the local church became a training ground for social action (Acts 2:45; 4:34). Meeting the needs of the poor, the infirm, the elderly, and widows is a responsibility of the church. Ministries to these groups can provide a foundation and a catalyst for further outreach and ministry to the community at large.

Christians are to be the salt of the earth and the light of the world (Matt. 5:13–16). In our needy society, we have abundant opportunities to preach the gospel of Jesus Christ and meet significant social needs. By combining these two areas of preaching and ministry, Christians can make a strategic difference in society.

Fallacies and Tactics

Let's now focus on some <u>logical fallacies and tactics</u> used against Christians. We need to exercise discernment and be on alert for these attempts to sidetrack moral and biblical reflection on some of the key issues of our day.

The first tactic is *equivocation*. This is the use of vague terms. Someone can start off using language we think we understand and then veer off into a new meaning. If you have been listening to the Probe radio program for any time, you are well aware of the fact that religious cults are often guilty of this. A cult member might say that he believes in salvation by grace. But what he really means is that you have to join his cult and work your way toward salvation. Make people define the vague terms they use.

This tactic is used frequently in bioethics. Proponents of embryonic stem cell research often will not acknowledge the distinction between adult stem cells and embryonic stem cells. Those trying to legalize cloning will refer to it as "somatic cell nuclear transfer." Unless you have a scientific background, you will not know that it is essentially the same thing.

A second tactic is what is often called "card stacking." That is when an opponent has a selective use of evidence. Don't jump on the latest bandwagon and intellectual fad without checking the evidence. Many advocates are guilty of listing all the points in their favor while ignoring the serious points against it.

For example, the major biology textbooks used in high school and college never provide students with evidence against evolution. Jonathan Wells, in his book <u>Icons of Evolution</u>, shows that the examples that are used in most textbooks are either wrong or misleading. Some of the examples are known frauds (such as the Haeckel embryos) and continue to show up in textbooks decades after they were shown to be fraudulent.

A third tactic is "appeal to authority." That means a person is relying on authority to the exclusion of logic and evidence. Just because an expert says it doesn't necessarily make it true. We live in a culture that worships experts, but not all experts are right. Hiram's Law says, "If you consult enough experts, you can confirm any opinion."

Those who argue that global warming is caused solely by human activity often say that "the debate in the scientific community is over." But an Internet search of critics of the theories behind global warming will show that there are many scientists with credentials in climatology or meteorology who have questions about the theory. It is not accurate to say that the debate is over when the debate still seems to be taking place.

A fourth tactic often used against Christians is known as an ad hominem attack. This is Latin for "against the man." People using this tactic attack the person instead of dealing with the validity of their argument. Often the soundness of an argument is inversely proportional to the amount of ad hominem rhetoric. If there is evidence for the position, proponents usually argue the merits of the position. When evidence is lacking, they attack the critics.

Christians who want public libraries to filter pornography from minors are accused of censorship. Citizens who want to define marriage as between one man and one woman are called bigots. Scientists who criticize evolution are subjected to withering attacks on their character and scientific credentials. Scientists who question global warming are compared to holocaust deniers.

Another tactic is the *straw man argument*. This is done by making your opponent's argument seem so ridiculous that it is easy to attack and knock down. Liberal commentators say that evangelical Christians want to implement a religious theocracy in America. That's not true. But the hyperbole works to marginalize Christian activists who believe they have a responsibility to speak to social and political issues within society.

A sixth tactic is *sidestepping*. This is done when someone dodges the issue by changing the subject. Ask a proponent of abortion whether the fetus is human and you are likely to see this technique in action. He or she might start talking about a woman's right to choose or the right of women to control their own bodies. Perhaps you will hear a discourse on the need to tolerate various viewpoints in a pluralistic society. But you probably won't get a straight answer to an important question.

A final tactic is the "red herring." That means to go off on a tangent (and is taken from the practice of luring hunting dogs off the trail with the scent of a herring). Proponents of embryonic stem cell research rarely will talk about the morality of destroying human embryos. Instead they will go off on a tangent and talk about the various diseases that could be treated and the thousands of people who could be helped with the research.

Be on the alert when someone in a debate changes the subject. They may want to argue their points on more familiar ground, or they may know they cannot win their argument on the relevant issue at hand.

A person with discernment will recognize these tactics and beware. We are called to develop discernment as we tear down false arguments raised up against the knowledge of God. By doing this we will learn to take every thought captive to the obedience to Christ (2 Cor. 10:4-5).

© 2007 Probe Ministries

Technological Challenges of the 21st Century

We live in historic times. And we will face new challenges as we enter the 21st century, especially in the area of technology. The fields of biotechnology and information technology have the capacity to change the social landscape and even alter the way we make ethical decisions. These are not challenges for the faint-hearted. We must bring a toughminded Christianity into the 21st century.

We are reminded in 1 Chronicles 12:32 (NIV) that the men of Issachar "understood the times and knew what Israel should do." Likewise, we must understand our times and know what we should do. New ethical challenges await us as we consider the moral issues of our day and begin to analyze them from a biblical perspective.

We should also enter into the task with humility. Over a hundred years ago, Charles Duell, Director of the U.S. Patent Office, was ready to close his office down because he believed that "Everything that can be invented has been invented."{1} We should not make the mistake of thinking that we can accurately see into the future. However, we can analyze trends and look at new inventions and begin to see the implications of these remarkable changes. Our challenge will always be to apply the timeless truths of Scripture to the quickly changing world around us.

How should Christians analyze the technological changes taking place? First we must begin by developing a theology of technology.

Theology of Technology

Technology is really nothing more than the systematic modification of the environment for human ends. This might be a process or activity that extends or enhances a human function. A telescope extends man's visual perception. A tractor extends one's physical ability. A computer extends a person's ability to calculate.

The biblical mandate for developing and using technology is stated in Genesis 1:28. God gave mankind dominion over the land, and we are obliged to use and manage these resources wisely in serving the Lord. God's ideal was not to have a world composed exclusively of primitive areas. Before the Fall (Gen. 2:15) Adam was to cultivate and keep the Garden of Eden. After the Fall the same command pertains to the application of technology to this fallen world, a world that "groans" in travail (Rom. 8:22). Technology can benefit mankind in exercising proper dominion, and thus remove some of the effects of the Fall (such as curing disease, breeding livestock, or growing better crops).

Technology is neither good or evil. The worldview behind the particular technology determines its value. In the Old Testament, technology was used both for good (e.g., the building of the ark, Gen. 6) and for evil (e.g., the building of the Tower of Babel, Gen. 11). Therefore, the focus should not be so much on the technology itself as on the philosophical motivation behind its use. Here are three important principles that should be considered.

First, technology should be seen as a tool, not as an end in itself. There is nothing sacred about technology. Unfortunately, Western culture tends to rely on it more than is appropriate. If a computer, for example, proves a particular point, people have a greater tendency to believe it than if the answer was a well-reasoned conclusion given by a person. If a machine can do the job, employers are prone to mechanize, even if human labor does a better or more creative job. Often our society unconsciously places machines over man. Humans become servants to machines rather than the other way around.

There is a tendency to look to science and engineering to solve problems that really may be due to human sinfulness (wars, prejudice, greed), the fallenness of the world (death, disease), or God's curse on Adam (finite resources). In Western culture especially, we tend to believe that technology will save us from our problems and thus we use technology as a substitute for God. Christians must not fall into this trap, but instead must exhibit their ultimate dependence on God. Christians must also differentiate between problems that demand a technological solution and ones that can be remedied by a social or spiritual one.

Second, technology should be applied in different ways, according to specific instructions. For example, there are distinctions between man and animal that, because we are created in God's image (Gen. 1:26-27), call for different applications of medical science. Using artificial insemination to improve the genetic fitness of livestock does not justify using it on human beings. Christians should resist the idea that just because we *can* do something, we *should* do it. Technological ability does not grant moral permission.

Third, ethics, rather than technology, must determine the direction of our society. Jacques Ellul has expressed the concern that technology moves society instead of vice versa. {2} Our society today seems all too motivated by a technological imperative in our culture. The technological ability to do something is not the same as a moral imperative to do it. Technology should not determine ethics.

Though scientists may possess the technological ability to be gods, they nevertheless lack the capacity to act like gods. Too often, man has tried to use technology to become God. He uses it to work out his own physical salvation, to enhance his own development, or even to attempt to create life. Christians who take seriously human fallenness will humbly admit that we often do not know enough about God's creation to use technology wisely. The reality of human sinfulness means that society should be careful to prevent the use of technology for greed and exploitation.

Technology's fruits can be both sweet and bitter. C. S. Lewis writes in the *Abolition of Man*, "From this point of view, what we call Man's power over Nature turns out to be power exercised by some men over men with Nature as its instrument. . . There neither is nor can be any simple increase of power on Man's side. Each new power won by man is a power over man as well. Each advance leaves him weaker as well as stronger. In every victory, besides being the general who triumphs, he is also the prisoner who follows the triumphal car."{3}

Christians must bring strong biblical critique to each technological advance and analyze its impact. The goal should be to liberate the positive effects of technology while restraining negative effects by setting up appropriate constraints against abuse.

The Challenge of Biotechnology

The age of biotechnology has arrived. For the first time in human history it is possible to completely redesign existing organisms, including man, and to direct the genetic and reproductive constitution of every living thing. Scientists are no longer limited to breeding and cross-pollination. Powerful genetic tools allow us to change genetic structure at the microscopic level and bypass the normal processes of reproduction.

For the first time in human history it is also possible to make multiple copies of any existing organism or of certain sections of its genetic structure. This ability to clone existing organisms or their genes gives scientists a powerful tool to reproduce helpful and useful genetic material within a population.

Scientists are also developing techniques to treat and cure genetic diseases through genetic surgery and genetic therapy. They can already identify genetic sequences that are defective, and soon scientists will be able to replace these defects with properly functioning genes.

Gene splicing (known as recombinant DNA technology) is fundamentally different from other forms of genetic breeding

used in the past. Breeding programs work on existing arrays of genetic variability in a species, isolating specific genetic traits through selective breeding. Scientists using gene splicing can essentially "stack" the deck or even produce an entirely new deck of genetic "cards."

But this powerful ability to change the genetic deck of cards also raises substantial scientific concerns that some "sleight-of-hand" would produce dangerous consequences. Ethan Singer said, "Those who are powerful in society will do the shuffling; their genes will be shuffled in one direction, while the genes of the rest of us will get shuffled in another."[4] Also there is the concern that a reshuffled deck of genes might create an Andromeda strain similar to the one envisioned by Michael Crichton is his book by the same title.[5] A microorganism might inadvertently be given the genetic structure for some pathogen for which there is no antidote or vaccine.

The potential benefits of gene splicing are significant. First, the technology can be used to produce medically important substances. The list of these substances is quite large and would include insulin, interferon, and human growth hormone. The technology also has great application in the field of immunology. In order to protect organisms from viral disease, doctors must inject a killed or attenuated virus. Scientists can use the technology to disable a toxin gene, thus producing a viral substance that triggers production of antibodies without the possibility of producing the disease.

A second benefit is in the field of agriculture. This technology can improve the genetic fitness of various plant species. Basic research using this technology could increase the efficiency of photosynthesis, increase plant resistance (to salinity, to drought, to viruses), and reduce a plant's demand for nitrogen fertilizer.

Third, gene splicing can aid industrial and environmental

processes. Industries that manufacture drugs, plastics, industrial chemicals, vitamins, and cheese will benefit from this technology. Also scientists have begun to develop organisms that can clean up oil spills or toxic wastes.

This last benefit, however, also raises one of the greatest scientific concerns over the use of biotechnology. The escape (or even intentional release) of a genetically engineered organism might wreak havoc on the environment. Scientists have created microorganisms that dissolve oil spills or reduce frost on plants. Critics of gene splicing fear that radically altered organisms could occupy new ecological niches, destroy existing ecosystems, or drive certain species to extinction.

A significant question is whether life should be patented at all. Most religious leaders say no. A 1995 gathering of religious leaders representing virtually every major religious tradition spoke out against the patenting of genetically engineered substances. They argued that life is the creation of God, not humans, and should not be patented as human inventions. <u>{6}</u>

The broader theological question is *whether* genetic engineering should be used and, if permitted, *how* it should be used. The natural reaction for many in society is to reject new forms of technology because they are dangerous. Christians, however, should take into account God's command to humankind in the cultural mandate (Gen. 1:28). Christians should avoid the reflex reaction that scientists should not tinker with life; instead Christians should consider how this technology should be used responsibly.

One key issue is the worldview behind most scientific research. Modern science rests on an evolutionary assumption. Many scientists assume that life on this planet is the result of millions of years of a chance evolutionary process. Therefore they conclude that intelligent scientists can do a better job of directing the evolutionary process than nature can do by chance. Even evolutionary scientists warn of this potential danger. Ethan Singer believes that scientists will "verify a few predictions, and then gradually forget that knowing something isn't the same as knowing everything. . . . At each stage we will get a little cockier, a little surer we know all the possibilities."{7}

In essence biotechnology gives scientists the tools they have always wanted to drive the evolutionary spiral higher and higher. Julian Huxley looked forward to the day in which scientists could fill the "position of business manager for the cosmic process of evolution." [8] Certainly this technology enables scientists to create new forms of life and alter existing forms in ways that have been impossible until now.

How should Christians respond? They should humbly acknowledge that God is the sovereign Creator and that man has finite knowledge. Genetic engineering gives scientists the technological ability to be gods, but they lack the wisdom, knowledge, and moral capacity to act like God.

Even evolutionary scientists who deny the existence of God and believe that all life is the result of an impersonal evolutionary process express concern about the potential dangers of this technology. Erwin Chargaff asked, "Have we the right to counteract, irreversibly, the evolutionary wisdom of millions of years, in order to satisfy the ambition and curiosity of a few scientists?" [9] His answer is no. The Christian's answer should also be the same when we realize that God is the Creator of life. We do not have the right to "rewrite the fifth day of creation." [10]

What is the place for genetic engineering within a biblical framework? The answer to that question can be found by distinguishing between two types of research. The first could be called genetic repair. This research attempts to remove genetic defects and develop techniques that will provide treatments for existing diseases. Applications would include various forms of genetic therapy and genetic surgery as well as modifications of existing microorganisms to produce beneficial results.

The Human Genome Project has been able to pinpoint the location and sequence of the approximately 100,000 human genes. {11} Further advances in biotechnology will allow scientists to repair these defective sequences and eventually remove these genetic diseases from our population.

Genetic disease is not part of God's plan for the world. It is the result of the Fall (Gen. 3). Christians can apply technology to fight these evils without being accused of fighting against God's will.<u>{12}</u> Genetic engineering can and should be used to treat and cure genetic diseases.

A second type of research is the creation of new forms of life. While minor modifications of existing organisms may be permissible, Christians should be concerned about the largescale production of novel life forms. That potential impact on the environment and on mankind could be considerable. Science is replete with examples of what can happen when an existing organism is introduced into a new environment (e.g., the rabbit into Australia, the rat to Hawaii, or the gypsy moth in the United States). One can only imagine the potential devastation that could occur when a newly created organism is introduced into a new environment.

God created plants and animals as "kinds" (Gen. 1:24). While there is minor variability within these created kinds, there are built-in barriers between these created kinds. Redesigning creatures of any kind cannot be predicted the same way new elements on the periodic chart can be predicted for properties even before they are discovered. Recombinant DNA technology offers great promise in treating genetic disease, but Christians should also be vigilant. While this technology should be used to repair genetic defects, it should not be used to confer the role of creator on scientists. A related issue in the field of biotechnology is human cloning. It appears that the cloning of a human being will no doubt take place some time in the future since many other mammals have been cloned. Proponents of human cloning argue that it would be a worthwhile scientific endeavor for at least three reasons. First, cloning could be used to produce spare parts. The clone would be genetically identical to the original person, so that a donated organ would not be rejected by the immune system. Second, they argue that cloning might be a way to replace a lost child. A dying infant or child could be cloned so that a couple would replace the child with a genetically identical child. Third, cloning could produce biological immortality. One woman approached scientists in order to clone her deceased father and offered to carry the cloned baby to term herself.{13}

While cloning of various organisms may be permissible, cloning a human being raises significant questions beginning with the issue of the sanctity of life. Human beings are created in the image of God (Gen. 1:2728) and therefore differ from animals. Human cloning would certainly threaten the sanctity of human life at a number of levels. First, cloning is an inefficient process of procreation as shown in cloning of a sheep. Second, cloning would no doubt produce genetic accidents. Previous experiments with frogs produced numerous embryos that did not survive, and many of those that did survive developed into grotesque monsters. Third, researchers often clone human embryos for various experiments. Although the National Bioethics Advisory Commission did ban cloning of human beings, it permitted the cloning of human embryos for research. Since these embryos are ultimately destroyed, this research raises the same pro-life concerns discussed in the chapter on abortion.

Cloning represents a tampering with the reproductive process at the most basic level. Cloning a human being certainly strays substantially from God's intended procedure of a man and woman producing children within the bounds of matrimony (Gen. 2:24). All sorts of bizarre scenarios can be envisioned. Some homosexual advocates argue that cloning would be an ideal way for homosexual men to reproduce themselves.

Although this would be an alternative form of reproduction, it is reasonable to believe that human clones would still be fully human. For example, some people wonder if a clone would have a soul since this would be such a diversion from God's intended process of procreation. A traducian view of the origin of the soul, where a person receives both body and soul from his parents rather than an act of special creation by God, would imply that a cloned human being would have a soul. In a sense a clone would be no different from an identical twin.

Human cloning, like other forms of genetic engineering, could be used to usher in a "brave new world." James Bonner says "there is nothing to prevent us from taking a thousand [cells]. We could grow any desired number of genetically identical people from individuals who have desirable characteristics." [14] Such a vision conjures up images of Alphas, Betas, Gammas, and Deltas from Aldous Huxley's book *Brave New World* and provides a dismal contrast to God's creation of each individual as unique.

Each person contributes to both the unity and diversity of humanity. This is perhaps best expressed by the Jewish Midrash: "For a man stamps many coins in one mold and they are all alike; but the King who is king over all kings, the Holy One blessed be he, stamped every man in the mold of the first man, yet not one of them resembles his fellow." [15] Christians should reject future research plans to clone a human being and should reject using cloning as an alternative means of reproduction.

The Challenge of Information Technology

The information revolution is the latest technological advance Christians must consider. The shift to computers and an information-based society has been swift as well as spectacular. The first electronic digital computer, ENIAC, weighed thirty tons, had 18,000 vacuum tubes, and occupied a space as large as a boxcar. {16} Less than forty years later, many hand-held calculators had comparable computing power for a few dollars. Today most people have a computer on their desk with more computing power than engineers could imagine just a few years ago.

The impact of computers on our society was probably best seen when in 1982 *Time* magazine picked the computer as its "Man of the Year"—actually listing it as "Machine of the Year." <u>{17}</u> It is hard to imagine a picture of the Spirit of St. Louis or an Apollo lander on the magazine cover under a banner "Machine of the Year." This perhaps shows how influential the computer has become in our society.

The computer has become helpful in managing knowledge at a time when the amount of information is expanding exponentially. The information stored in the world's libraries and computers doubles every eight years. <u>{18}</u> In a sense the computer age and the information age seem to go hand in hand.

The rapid development and deployment of computing power however has also raised some significant social and moral questions. People in this society need to think clearly about these issues, but often ignore them or become confused.

One key issue is computer crime. In a sense computer fraud is merely a new field with old problems. Computer crimes are often nothing more than fraud, larceny, and embezzlement carried out by more sophisticated means. The crimes usually involve changing address, records, or files. In short, they are old-fashioned crimes using high technology. Another concern arises from the centralization of information. Governmental agencies, banks, and businesses use computers to collect information on its citizens and customers. For example, it is estimated that the federal government has on average about fifteen files on each American. {19} Nothing is inherently wrong with collecting information if the information can be kept confidential and is not used for immoral actions. Unfortunately this is often difficult to guarantee.

In an information-based society, the centralization of information can be as dangerous as the centralization of power. Given sinful man in a fallen world, we should be concerned about the collection and manipulation of vast amounts of personal information.

In the past, centralized information processing was used for persecution. When Adolf Hitler's Gestapo began rounding up millions of Jews, information about their religious affiliation was stored in shoe boxes. U.S. Census Bureau punch cards were used to round up Japanese Americans living on the West Coast at the beginning of World War II.{20} Modern technology makes this task much easier. Governmental agencies routinely collect information about citizens' ethnic origin, race, religion, gross income, and even political preference.

Moreover, the problem it not limited to governmental agencies. Many banking systems, for example, utilize electronic fundstransfer systems. Plans to link these systems together into a national system could also provide a means of tracking the actions of citizens. A centralized banking network could fulfill nearly every information need a malevolent dictator might have. This is not to say that such a thing will happen. It does mean, however, that societies that want to monitor their citizens will be able to do so more efficiently with computer technology.

A related problem arises from the confidentiality of computer

records. Computer records can be abused like any other system. Reputations built up over a lifetime can be ruined by computer errors and often there is little recourse for the victim. Congress passed the 1974 Privacy Act which allows citizens to find out what records federal bureaucracies have on them and to correct any errors.{21} But more legislation is needed than this particular act.

The proliferation of computers has presented another set of social and moral concerns. In the recent past most of that information was centralized and required the expertise of the "high priests of FORTRAN" to utilize it. Now most people have access to information because of increasing numbers of personal computers and increased access to information through the Internet. This access to information will have many interesting sociological ramifications, and it is also creating a set of troubling ethical questions. The proliferation of computers that can tie into other computers provides more opportunities for computerized crime.

The news media frequently carry reports about computer "hackers" who have been able to gain access to confidential computer systems and obtain or interfere with the data banks. Although these were supposed to be secure systems, enterprising computer hackers broke in anyway. In many cases this merely involved curious teenagers. Nevertheless computer hacking has become a developing area of crime. Criminals might use computer access to forge documents, change records, and draft checks. They can even use computers for blackmail by holding files for ransom and threatening to destroy them if their demands are not met. Unless better methods of security are found, professional criminals will begin to crack computer security codes and gain guick access into sensitive files.

As with most technological breakthroughs, engineers have outrun lawmakers. Computer deployment has created a number of legal questions. First, there is the problem of establishing penalties of computer crime. Typically, intellectual property has a different status in our criminal justice system. Legal scholars should evaluate the notion that ideas and information need not be protected in the same way as property. Legislators need to enact computer information protection laws that will deter criminals, or even curious computer hackers, from breaking into confidential records.

A second legal problem arises from the question of jurisdiction. Telecommunications allows information to be shared across state and even national borders. Few federal statutes govern this area and less than half the states have laws dealing with information abuse.

Enforcement will also be a problem for several reasons. One reason is the previously stated problem of jurisdiction. Another is that police departments rarely train their personnel in computer abuse and fraud. A third reason is lack of personnel. Computers are nearly as ubiquitous as telephones or photocopiers.

Computer fraud also raises questions about the role of insurance companies. How do companies insure an electronic asset? What value does computer information have? These questions also need to be addressed in the future.

Technology and Human Nature

These new technologies will also challenge our views of human nature. Already medical technology is challenging our views of what it means to be human. A key question in the abortion debate is, When does human life begin? Is an embryo human? What about a developing fetus? Although the Bible provides answers to these questions, society often takes its cue from pronouncements that do not square with biblical truth.

Biotechnology raises yet another set of questions. Is a frozen embryo human and deserving of a right to life? Is a clone human? Would a clone have a soul? These and many more questions will have to be answered. Although the Bible doesn't directly address such issues as genetically engineered humans or clones, key biblical passages (Ps. 139, Ps. 51:5) certainly seem to teach that an embryo is a human created in the image of God.

Information technology also raises questions about human nature in an unexpected way. Researchers believe that as computer technology advances, we will begin to analyze the human mind in physical terms. In *The Society of Mind*, Marvin Minsky, professor at the Massachusetts Institute of Technology, says that "the mind, the soul, the self, are not a singly ghostly entity but a society of agents, deeply integrated, yet each one rather mindless on its own."{22} He dreams of being able ultimately to reduce mind (and therefore human nature) to natural mechanism. Obviously this is not an empirical statement, but a metaphysical one that attempts to reduce everything (including mind) to matter.

Will we some day elevate computers to the level of humanity? One article asked the question, Would an Intelligent Computer Have a "Right to Life?" <u>{23}</u> Granting computer rights might be something society might consider since many are already willing to grant certain rights to animals.

In a sense the question is whether an intelligent computer would have a soul and therefore access to fundamental human rights. As bizarre as the question may sound, it was no doubt inevitable. When 17th century philosopher Gottfried Wilhelm von Leibniz first described a thinking machine, he was careful to point out that this machine would not have a soul-fearful perhaps of reaction from the church. Already scientists predict that computer intelligence will create "an intelligence beyond man's" and provide wonderful new capabilities.{25} One of the great challenges in the future will be how to manage new computing power that will outstrip human intelligence. Once again this is a challenge for Christians in the 21 st century. Human beings are more than just proteins and nucleic acids. Human being are more than bits and bytes. We are created in the image of God and therefore have a spiritual dimension. Perhaps this must be our central message to a world enamored with technology: human beings are created in the image of God and must be treated with dignity and respect.

Notes

1. Memo from Charles H. Duell, Director of the U.S. Patent Office, 1899.

2. Jacques Ellul, *The Technological Society* (New York: Vintage, 1964).

3. C. S. Lewis, *The Abolition of Man* (New York: Macmillan, 1947), 6869, 71 (italics his).

4. Ethan Singer, cited in Nicholas Wade, "Gene Splicing: Congress Starts Framing Law for Research," *Science*, 1 April 1977, 39.

5. Michael Crichton, *The Andromeda Strain* (New York: Dell, 1969).

6. Kenneth Woodward, "Thou Shalt Not Patent!" *Newsweek*, 29 May 1995, 68.

7. Testimony by Ethan Singer before the Subcommittee on Health and the Environment, House Committee on Interstate and Foreign Commerce, *Hearings*, 15 March 1977, 79.

8. Julian Huxley, cited in Joseph Fletcher, *The Ethics of Genetic Control* (Garden City, NY: Anchor, 1974), 8.

9. Erwin Chargaff, cited in George Wald, "The Case against Genetic Engineering," *The Sciences*, May 1976, 10.

10. Nancy McCann, "The DNA Maelstrom: Science and Industry

Rewrite the Fifth Day of Creation," Sojourners, May 1977, 2326.

11. Philip Elmer-Dewitt, "The Genetic Revolution," *Time*, 17 January 1994, 49.

12. Skeptics sometimes argue that fighting disease is the same as fighting against God's will. Albert Camus poses this dilemma for Dr. Reux in *The Plague*. Christians should follow the cultural mandate (Gen. 1:28) and use genetic technology to treat and cure genetic disease.

13. Sharon Begley, "Little Lamb, Who Made Thee?" *Newsweek*, 10 March 1997, 55.

14. James Bonner, quoted in *Los Angeles Times*, 17 May 1971, 1.

15. N. N. Glazer, *Hammer on the Rock: A Short Midrash Reader* (New York: Schocken, 1962), 15.

16. Philip Elmer-De-Witt, "A Birthday Party for ENIAC," *Time*,24 February 1986, 63.

17. "Machine of the Year," Time, 3 January 1983, 1324.

18. "Harper's Index," Harper's, October 1984, 9.

19. Ted Gest, "Who Is Watching You?" U.S. News and World Report, 12 July 1982, 35.

20. David Burnham, *The Rise of the Computer State* (New York: Random House, 1983).

21. Martha Farnsworth Riche, "The Rising Tide of Privacy Laws," *American Demographics*, March 1990, 24.

22. Richard Lipkin, "Making Machines in Mind's Image," *Insight*, 15 February 1988, 812.

23. Robert Mueller and Erik Mueller, "Would an Intelligent Computer Have a 'Right to Life?'" *Creative Computing*, August

1983, 14961.

24. Danny Hillis, "Can They Feel Your Pain?" *Newsweek*, 5 May 1997, 57.

25. Robert Jastrow, "Toward an Intelligence beyond Man's," *Time*, 20 February 1978, 59.

©2000 Probe Ministries.