

11 – Technology, Communication, Socialization

Issues:

1. Innovation in technology and communication significantly shapes the evolution of American identity and culture.
2. Consumerism permeates popular culture and also shapes standards of privacy, morality and rights.

Student Outcomes:

1. Students will be able to identify the elements of a consumer culture.
2. Students will be able to discuss how advances in technology have increased both the speed with which businesses and consumers make decisions and the number of markets in which they participate.
3. Students will recognize the shift in America from an agrarian to an industrial and finally an information and service based economy.
4. Students will be able to discuss how technology has shaped our national self-identity.
5. Students will be able to demonstrate how technology has changed perceptions of both high and popular culture in America.
6. Students will recognize how information technology has forced reexamination of many basic rights.

Note: First day's readings: pages 1–6; second day's readings: pages 7–13.

Students should come to class prepared to teach the other students in the class what they have learned through preparing for the class and be able to provide evidence to support their ideas.

Introduction

This topic seeks to do several things, which can be a dangerous strategy. The main thing to keep in mind is that the focus of this topic is to consider how developments in technology have changed American culture, including the way we live our life on a daily basis, the way we work, the way we interact with each other, and how we think about rights.

“Nothing Shall Be Withheld”

Brigham Young University–Idaho Devotional
Elder Merrill J. Bateman
May 22, 2007

In a dank, dark dungeon during one of Joseph Smith’s bleakest hours, the Prophet pleaded with the Lord to make Himself known and to remember His suffering saints. Listen to Joseph’s pleadings: “O God, where art thou? . . . How long shall thy hand be stayed, . . . behold from the eternal heavens the wrongs of thy people? . . . Yea, O Lord, how long shall they suffer these wrongs and unlawful oppressions, . . . O Lord God Almighty, . . . stretch forth thy hand; . . . Remember thy suffering saints.” (D&C 121:1-6.)

In response to Joseph’s prayer came one of the most remarkable revelations of this dispensation, the 121st Section of the Doctrine and Covenants. First, Joseph was told that his adversity and afflictions would be “but a small moment” (D&C 121:7). He was assured that those who wreaked vengeance on the saints would receive their just dues.

All Knowledge to be Revealed

And then the Lord told Joseph that great knowledge was about to be revealed to the earth through the power of the Holy Ghost. The scripture states: “God shall give unto you knowledge by his Holy Spirit . . . that has not been revealed since the world was until now” (D&C 121:26). The Lord went on to say that it would be “A time to come in the which nothing shall be withheld, . . . All thrones and dominions, principalities and powers, shall be revealed . . . And also, if there be bounds set to the heavens or to the seas, or to the dry land, or to the sun, moon, or stars—All the times of their revolutions, all the appointed days, months, and years, . . . and all their glories, laws, and set times, shall be revealed in the days of the dispensation of the fulness of times” (D&C 121:28-31).

The Lord makes clear that in the last days, the dispensation of the fulness of times, all things will be revealed. (See D&C 101:23-34.) All knowledge includes the laws that govern the earth as well as those which are spiritual in nature. The Apostle Paul prophesied 1800 years earlier “That in the dispensation of the fulness of times” the Lord will “gather together in one all things in Christ, both which are in heaven, and which are on earth” (Ephesians 1:10).

One might interpret “all things in Christ” to refer only to spiritual laws, but it is more since the great Jehovah made “all things” (John 1:3). The Apostle Peter also spoke of a period of “refreshing” coincident with a “restitution of all things” which would precede the Second Coming of the Lord (Acts 3:19, 21). It is true that we understand these apostolic prophecies to refer to the Restoration of the gospel in the last days. But the Lord’s statement to Joseph Smith in Liberty Jail indicates that more than spiritual truths will be revealed. He states that knowledge pertaining not only to the heavens, but also to the seas, the earth, thrones, dominions, etc. will be made known.

Church educational institutions have a dual purpose: to provide both a temporal and a spiritual education. Temporally, BYU-Idaho prepares you to provide for yourself and your family. It prepares you to make a contribution to the communities in which you live. Spiritually, it educates you in the laws of the Kingdom so that you can contribute to the establishment of the Church. Ultimately, of course, the purpose of this educational opportunity is to bring you to Christ.

The Pattern for Revealing Spiritual Truths

As Latter-day Saints, we understand the pattern by which a new dispensation is initiated and spiritual truths are revealed. It begins with the Lord calling a prophet, angels are then sent to instruct him (see Moroni 7:29-32). Others are called to assist. The priesthood is transmitted to them with its keys and powers. Through the priesthood, the Gift of the Holy Ghost is given as a personal guide and to establish the Church. A book is often provided which contains the fulness of the gospel and serves as a witness of the Lord and His work (see Exodus 24:12, Ezekiel 2:9-10, 1 Nephi 1:11). The calling of Joseph Smith was not the first to follow this pattern. The callings of Moses, Ezekiel, Lehi, and, undoubtedly other prophets followed these steps. Even John the Revelator's commission to write the history of the earth and its dispensations included an appearance from the Lord, an angel to guide him, and a book (see Revelations 1, 5:1-2).

The Source of Temporal Knowledge

Now, what about temporal knowledge? How is it revealed and to whom? It is clear that secular inventions and innovations generally do not come through prophets. Their mission is special as they focus on spiritual things. However, secular knowledge has the same source as does spiritual truths. God is omniscient and the source of all truth. The Savior said, "I am the way, the truth, and the light" (John 14:6). The Light of Christ is given to every man and woman and anyone who responds to the Light may be a conduit for secular knowledge.

The Burst of Secular Knowledge Coincident with The Restoration

It is apparent that secular knowledge has flowered since the time of Joseph Smith, that the Lord has been flooding the earth with temporal knowledge as well as spiritual. Let me illustrate the explosion of temporal knowledge with two statements, the first from Stephen E. Ambrose's book, *Undaunted Courage*, and the second William J. Bernstein's *The Birth of Plenty*. Speaking of the early 1800s, Ambrose wrote:

A critical fact in the world of 1801 was that nothing moved faster than the speed of a horse. No human being, no manufactured item, no bushel of wheat, no side of beef, no letter, no information, no idea, order or instruction of any kind moved faster. Nothing had moved faster, and, as far as Jefferson's contemporaries were able to tell, nothing ever would.²

The horse had been the mainstay of land transportation since the dawn of history. As far as anyone knew in the early 1800s, it would remain that way. It took Thomas Jefferson ten days to travel from Monticello to Philadelphia. In less than 50 years, with the advent of the steam locomotive, the trip was cut to one day. The invention of the telegraph in 1837 brought instantaneous communication across the globe that abruptly altered the political, social and economic affairs of nations. And these inventions were just the beginning.³

In describing the dramatic changes that occurred in the first half of the 19th century, William Bernstein writes:

When we look at the [facts], it becomes crystal clear that *something happened* ... in the early nineteenth century. Before then, the rate of improvement in the lot of mankind was small and stuttering, and after, substantial and steady ... Until approximately 1820, per capita world economic growth – the single best way of measuring human material progress – registered near zero ... Then, not long after 1820, prosperity began flowing in an ever-increasing torrent; with each successive generation, the life of the son became observably more comfortable, informed, and predictable than that of the father.⁴

The pattern of world economic wellbeing described by Bernstein is illustrated in a graph developed by a Scottish economist, Angus Maddison. Maddison graduated from Cambridge University in 1948 and, for the next 30 years, served as an economist for one of the world's largest international aid organizations. During this time he became fascinated with the problems of the developing world and the differences in wealth between rich and poor nations. In 1978 he accepted a professorship at a Dutch university and for the next 20 years developed a model of world economic growth for the last 2000 years. The results were both stunning and unexpected.

As the graph illustrates, the economic wellbeing of the average individual, measured as real per capita output or income, "did not change at all during the first millennium after the birth of Christ. Over the next

800 years, between A.D. 1000 and A.D. 1800, things did not get much better.”⁵ There were few innovations and the improvement prior to 1800 was marginal.

The real progress begins in 1820 when the graph suddenly turns upward and begins a long steady climb to unprecedented heights. Maddison indicates that the exact timing of the turn is somewhat arbitrary. American data suggests that it may have been a few years before 1820 while British data suggests a date as late as 1830. Regardless, it is clear that sometime during the first half of the nineteenth century, world economic growth took off and continued upward despite wars, famines, and social strife.⁶

Bernstein describes Maddison’s findings with the following words: “Beginning around 1820, the pace of economic advance picked up noticeably, making the world a better place to live in. What happened? An explosion in technological innovation the likes of which had never before been seen.”⁷

The Foundations for The Explosion of Secular Knowledge in The 1800s

What caused the sudden change in economic wellbeing? It was an explosion in technological innovation unlike anything the world had seen. It was an explosion of ideas and knowledge in an environment that allowed the innovations to take hold. During the period of the enlightenment, and even before, the Lord prepared the earth not only for the return of the gospel, but the reception and dispersion of secular knowledge that had never before been revealed (see D&C 121:26, 28-29). Four environmental foundations necessary for the use of the technological innovations were put in place during the centuries prior to 1820. They included laws that secured property rights, safe havens for scientific rationalism, efficient capital markets, and the bases for improved transportation and communications.⁸

Prior to the 1700s there were very few technological discoveries. The major innovations were the three-crop rotational system, the horseshoe and horse collar, the water mill, the windmill, the four-wheeled cart and the printing press. The first economically viable steam engine came into existence in the late 1700s. The steam engine was important because it provided the foundation for the nineteenth century to escape from the limitations of animal muscle, wind, and water. It provided the power that led to modern manufacturing and the steamship and railroad. The barriers to the use of electricity for communication were finally overcome in the early part of the nineteenth century. Thus the foundations were laid for the explosion of knowledge that began with the openings of the heavens in 1820.

The Explosion of Secular Knowledge—Post 1820

One could make a long list of the scientific discoveries that followed 1820. These discoveries brought more change in the lives of people between 1825 and 1875 than at any other time in history. Railroads and steamships brought swift and reliable travel for the first time. Roads were macadamized which tied nations and continents together. Factories were mechanized into highly productive units. The telegraph brought instantaneous global communications. The instantaneous flow of information eliminated great inefficiencies in world markets and increased productivity. Cars, telephones, airplanes and computers followed. Advances in medicine improved health and extended life. Eventually, rockets became a reliable means of extraterrestrial transportation for human beings and satellites.

For a few moments, I will examine some of the key innovations of the last 50 years and their implications for the spread of the gospel. In doing so, I appreciate being able to use some materials developed by Brother Gerrit Gong of BYU and Clint Melander at Church headquarters.

The first innovation is the satellite. The Russians launched the first satellite into orbit on Friday, October 4, 1957, the first day of October general conference that year. The United States followed in 1958. To date, eight countries have independently launched satellites into orbit on indigenously developed launch vehicles. In addition to Russia and the U.S., other countries include France, Japan, China, the United Kingdom, India and Israel.

The Church began using satellites for communications 25 years ago. Today, the Church leases transponders on six satellites that provide downlinks to more than 2,900 stakes, districts and missions around the globe. The satellite coverage allows 87 percent of Church membership to receive a signal. It will not be long before the other 13 percent are also within range. Satellites have allowed the Church to develop a global communications network that is extraordinarily important for a worldwide Church. This allows members to receive general conference and Church leaders to communicate with other leaders across the globe.

Last week, Elder Scott and I held a videoconference with the Area Presidency in West Africa regarding missionary work, the strengthening of stakes and temple worship. This coming Sunday, President Monson, Elder Holland, Sister Lant and I will be part of a satellite stake conference broadcast for all of the stakes in Samoa and Tahiti. Satellites have become an important medium for communicating with the members of the Church.

The Internet is a network of networks created from computers and cables that stretches across the globe. It delivers packets of information anywhere in the world, generally well under a second. It began in 1969 when communications were established between UCLA and the Stanford Research Institute. In 1990, CSNET came into being which linked universities in North America and then Europe. In 1995, popular interest exploded as the U.S. Government transferred control of the Internet to independent organizations.

In 1991, British computer scientist, Tim Berners-Lee, created the World Wide Web and posted the first Web site on August 6, 1991. The World Wide Web consists of the documents, sounds, videos and collections of data that ride on the Internet. Access to the Internet is highest in Japan at approximately 90 percent. North America is second at 70 percent. Penetration in Australia and Oceania is 54 percent and Europe follows with 39 percent. Asian penetration is eleven percent. The dominant language, of course, is global English.

The vast majority of searches regarding the Church are under the term “Mormon” rather than under the official Church name (about 23 million hits per day). The majority of the hits are sympathetic in nature i.e., most hits represent a positive interest in the Church. Still, there is a significant interest and number of hits directed to negative or even antagonistic information.

The Internet is a missionary tool. Many individuals use the net to find out information on the Church. Often, after the first meeting with the missionaries, investigators will go to the Internet to learn more. The Internet is also a key source of communications not only for the general populace but also for the Church. E-mail is a key method of communicating with leaders across the earth. The Internet is also a source for receiving general conference and other broadcasts.

In today’s world, one cannot talk about innovation without mentioning the iPod. Some call the iPod the first consumer icon of the 21st century. When you see a young person with earbud headphones, chances are they are listening to one.

iPods are becoming more and more useful. They are used not only for listening to music, but educational materials may be stored on them. They can be used to study a foreign language or listen to general conference. Brothers and sisters, do not waste time with long periods of listening to the world’s music. Rather, use the devices in productive ways to increase your understanding of the world and the Lord’s work.

The next chart illustrates the pervasiveness of electronic equipment. According to a recent *Business Week* magazine article, “human beings produced more transistors than they did grains of rice” in 2005.⁹ Those transistors powered 2 billion cell phones, 1.5 billion televisions, 820 million personal computers, 190 million Game Boys, 70 million iPods, 50 million PDAs and 3.2 million BlackBerrys.

Given Geoffrey Moore’s law that the power of semiconductor chips will double roughly every 18 to 24 months, electronic devices will become even smaller, less expensive and more capable. Access to information will become more personal, available anytime, and anywhere.

Not only are electronic devices proliferating, but there is also a convergence. Last year, mobile phone manufacturers shipped 850 million phones to global customers. The current cost for a regular unit is about \$30. The industry goal is to reduce that cost to \$20 in the near future.

The first mobile phone produced by Motorola, nicknamed “The Brick” weighed 2 pounds and cost \$3,995. It was nothing more than a wireless phone. The new Apple iPhone weighs 4.8 ounces and offers voice, multimedia, and Internet on a touch screen. It will cost between \$400 and \$600 depending on storage capacity.

Moore’s law fuels the technology convergence that is taking place. As the picture illustrates, devices conveying video, voice, data, and multi-media are converging to a personal, portable, affordable handheld device that almost everyone, everywhere will own or be able to access.

Can you think of Church uses for such a device? It will be useful for missionary work, family history searches, communications, education, and many other needs. I also know that Satan—who has already found many uses for the various devices—will continue to tempt people with material that he places on the new ones.

Now, may we return to the beginning. In a dank, dark dungeon called Liberty Jail, the Lord revealed to the Prophet Joseph Smith that He would unleash “knowledge by [the] holy spirit . . . that has not been revealed since the world was even until now” (D&C 121:25).

Moreover, the knowledge would not only pertain to the spiritual realm but also include knowledge pertaining to the earth (see D&C 121:25, 29-31). From the time of Christ until 1820, Angus Maddison’s data supports the notion that the heavens were almost sealed during the dark ages. Finally, a small stream of light began to emerge between 1500 and 1800. And then Maddison says something happened. The switch was turned on and a flood of knowledge pierced men’s minds beginning about 1820.

Brothers and sisters, you are living the miracle, the promise made by the Lord to His prophet 170 years ago. It is interesting that the world is just beginning to understand what has happened, but still does not perceive the Source. The technological inventions and discoveries of the last 170 years are a clear witness that our Father in Heaven and His Son deliver on Their promises. They control the universe. They know the pace and the extent of the discoveries needed for the gospel to reach every nation, kindred, tongue and people.

I testify to you that the gospel of Jesus Christ was restored through the Prophet Joseph Smith and that President Gordon B. Hinckley has all of the priesthood keys necessary to save and exalt you and me. I testify that the Savior performed the Atonement so that our shortcomings will not limit us if we exercise faith in Him, repent, and partake of the ordinances and covenants associated with His work. Finally, the Lord is the Source of all truth including the marvelous scientific discoveries and inventions that have improved mankind’s lot during the last 200 years. May our testimonies of Him deepen and may we enjoy the power of His Holy Spirit in our lives is my prayer in the name of Jesus Christ, amen.

1. What is the main point Elder Bateman is trying to make? What is Elder Bateman’s attitude toward technological development?

² Stephen E. Ambrose, *Undaunted Courage*, (New York: Simon and Schuster, 1996), 52.

³ William J. Bernstein, *The Birth of Plenty*, (New York: McGraw-Hill, 2004), 2.

⁴ Ibid. 3-4.

⁵ Ibid. 18-19.

⁶ Ibid. 19.

⁷ Ibid. 15.

⁸ Ibid. Chapters 2-5.

⁹ *Business Week*, June, 2006, 27.

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[End of first day’s readings.]

Zion in the Midst of Babylon

Elder David R. Stone

April 2006

Last summer, my wife and I had the opportunity to travel to San Diego, California, and there see Shakespeare's *Macbeth* at the Old Globe Theatre. We saw two performances, because our daughter Carolyn was playing the part of one of the three witches in that play. Of course, we were delighted to see her in the play and even more delighted when, at a dramatic moment, she said those famous lines: "By the pricking of my thumbs, / Something wicked this way comes" (act 4, scene 1, lines 40–41).

When I heard that, I thought how useful it would be to have an early-warning system which would tell us about the approach of evil and allow us to be prepared for it. Evil is coming toward us, whether or not we have an early-warning system.

On a later occasion, my wife and I were driving cross-country one night and were approaching a great city. As we came over the hills and saw the bright lights on the horizon, I nudged my wife awake and said, "Behold the city of Babylon!"

Of course, there is no particular city today which personifies Babylon. Babylon was, in the time of ancient Israel, a city which had become sensual, decadent, and corrupt. The principal building in the city was a temple to a false god, which we often refer to as Bel or Baal.

However, that sensuality, corruption, and decadence, and the worshipping of false gods are to be seen in many cities, great and small, scattered across the globe. As the Lord has said: "They seek not the Lord to establish his righteousness, but every man walketh in his own way, and after the image of his own god, whose image is in the likeness of the world" ([D&C 1:16](#)).

Too many of the people of the world have come to resemble the Babylon of old by walking in their own ways, and following a god "whose image is in the likeness of the world."

One of the greatest challenges we will face is to be able to live in that world but somehow not be of that world. We have to create Zion in the midst of Babylon.

"Zion in the midst of Babylon." What a luminous and incandescent phrase, as a light shining in the midst of spiritual darkness. What a concept to hold close to our hearts, as we see Babylon becoming more widespread. We see Babylon in our cities; we see Babylon in our communities; we see Babylon everywhere.

And with the encroachment of Babylon, we have to create Zion in the midst of it. We should not allow ourselves to be engulfed by the culture which surrounds us. We seldom realize the extent to which we are a product of the culture of our place and time.

During the days of ancient Israel, the people of the Lord were an island of the one true God, surrounded by an ocean of idolatry. The waves of that ocean crashed incessantly upon the shores of Israel. Despite the commandment to make no graven image and bow down before it, Israel seemingly could not help itself, influenced by the culture of the place and time. Over and over again—despite the prohibition of the Lord, despite what prophet and priest had said—Israel went seeking after strange gods and bowed down before them.

How could Israel have forgotten the Lord, who brought them out of Egypt? They were constantly pressured by what was popular in the ambience in which they lived.

What an insidious thing is this culture amidst which we live. It permeates our environment, and we think we are being reasonable and logical when, all too often, we have been molded by the ethos, what the Germans call the *zeitgeist*, or the culture of our place and time.

Because my wife and I have had the opportunity to live in 10 different countries, we have seen the effect of the ethos on behavior. Customs which are perfectly acceptable in one culture are viewed as unacceptable in another; language which is polite in some places is viewed as abhorrent in others. People in every culture

move within a cocoon of self-satisfied self-deception, fully convinced that the way they see things is the way things really are.

Our culture tends to determine what foods we like, how we dress, what constitutes polite behavior, what sports we should follow, what our taste in music should be, the importance of education, and our attitudes toward honesty. It also influences men as to the importance of recreation or religion, influences women about the priority of career or childbearing, and has a powerful effect on how we approach procreation and moral issues. All too often, we are like puppets on a string, as our culture determines what is "cool."

There is, of course, a zeitgeist to which we should pay attention, and that is the ethos of the Lord, the culture of the people of God. As Peter states it, "But ye are a chosen generation, a royal priesthood, an holy nation, a peculiar people; that ye should shew forth the praises of him who hath called you out of darkness into his marvellous light" ([1 Peter 2:9](#)).

It is the ethos of those who keep the Lord's commandments, walk in His ways, and "live by every word that proceedeth forth from the mouth of God" ([D&C 84:44](#)). If that makes us peculiar, so be it.

My involvement with the building of the Manhattan temple gave me the opportunity to be in the temple quite often prior to the dedication. It was wonderful to sit in the celestial room and be there in perfect silence, without a single sound to be heard coming from the busy New York streets outside. How was it possible that the temple could be so reverently silent when the hustle and bustle of the metropolis was just a few yards away?

The answer was in the construction of the temple. The temple was built within the walls of an existing building, and the inner walls of the temple were connected to the outer walls at only a very few junction points. That is how the temple (Zion) limited the effects of Babylon, or the world outside.

There may be a lesson here for us. We can create the real Zion among us by limiting the extent to which Babylon will influence our lives.

When, about 600 years B.C., Nebuchadnezzar came from Babylon and conquered Judah, he carried away the people of the Lord. Nebuchadnezzar selected some of the young men for special education and training.

Among them were Daniel, Hananiah, Mishael, and Azariah. They were to be the favored ones among the young people brought to Babylon. The king's servant instructed them that they were to eat of the king's meat and drink of the king's wine.

Let us clearly understand the pressures that the four young men were under. They had been carried away as captives by a conquering power and were in the household of a king who held the power of life or death over them. And yet Daniel and his brothers refused to do that which they believed to be wrong, however much the Babylonian culture believed it to be right. And for that fidelity and courage, the Lord blessed them and "gave them knowledge and skill in all learning and wisdom" ([Daniel 1:17](#)).

Seduced by our culture, we often hardly recognize our idolatry, as our strings are pulled by that which is popular in the Babylonian world. Indeed, as the poet Wordsworth said: "The world is too much with us" ("The World Is Too Much with Us; Late and Soon," in *The Complete Poetical Works of William Wordsworth* [1924], 353).

In his first epistle, John writes:

"I have written unto you . . . because ye are strong, and the word of God abideth in you, and ye have overcome the wicked one.

"Love not the world, neither the things that are in the world" ([1 John 2:14–15](#)).

We do not need to adopt the standards, the mores, and the morals of Babylon. We can create Zion in the midst of Babylon. We can have our own standards for music and literature and dance and film and language. We can have our own standards for dress and deportment, for politeness and respect. We can live in accordance with the Lord's moral laws. We can limit how much of Babylon we allow into our homes by the media of communication.

We can live as a Zion people, if we wish to. Will it be hard? Of course it will, for the waves of Babylonian culture crash incessantly against our shores. Will it take courage? Of course it will.

We have always been entranced by tales of courage of those who faced fearsome odds and overcame. Courage is the basis and foundation for all of our other virtues; the lack of courage diminishes every other virtue that we have. If we are to have Zion in the midst of Babylon, we will need courage.

Have you ever imagined that, when it came to the test, you would perform some act of bravery? I know I did, as a boy. I imagined that someone was in peril and that, at the risk of my own life, I saved him. Or in some dangerous confrontation with a fearsome opponent, I had the courage to overcome. Such are our youthful imaginations!

Almost 70 years of life have taught me that those heroic opportunities are few and far between, if they come at all.

But the opportunities to stand for that which is right—when the pressures are subtle and when even our friends are encouraging us to give in to the idolatry of the times—those come along far more frequently. No photographer is there to record the heroism, no journalist will splash it across the newspaper's front page. Just in the quiet contemplation of our conscience, we will know that we faced the test of courage: Zion or Babylon?

Make no mistake about it: much of Babylon, if not most of it, is evil. And we will not have the pricking of our thumbs to warn us. But wave after wave is coming, crashing against our shores. Will it be Zion, or will it be Babylon?

If Babylon is the city of the world, Zion is the city of God. The Lord has said of Zion: "Zion cannot be built up unless it is by the principles of the law of the celestial kingdom" ([D&C 105:5](#)) and, "For this is Zion—the pure in heart" ([D&C 97:21](#)).

Wherever we are, whatever city we may live in, we can build our own Zion by the principles of the celestial kingdom and ever seek to become the pure in heart. Zion is the beautiful, and the Lord holds it in His own hands. Our homes can be places which are a refuge and protection, as Zion is.

We do not need to become as puppets in the hands of the culture of the place and time. We can be courageous and can walk in the Lord's paths and follow His footsteps. And if we do, we will be called Zion, and we will be the people of the Lord.

I pray that we will be strengthened to resist the onslaught of Babylon and that we can create Zion in our homes and our communities—indeed, that we may have "Zion in the midst of Babylon."

We seek Zion because it is the habitation of our Lord, who is Jesus Christ, our Savior and Redeemer. In Zion and from Zion, His luminous and incandescent light will shine forth, and He will rule forever. I bear witness that He lives and loves us and will watch over us.

In the name of Jesus Christ, amen.

2. What is the main point Elder Stone is trying to make? What is Elder Stone's attitude toward technological development? How can Elder Bateman's and Elder Stone's arguments be made compatible with each other?

We live today in what many have described as a **consumer culture**. This culture developed along with the growth of big business (see Topic 6) but has taken on a life of its own as we the people have been drawn in to not only using but "wanting" new products. Advertising and media promotions are becoming ever more adept at convincing us to buy things we don't need with money we don't have. Microwaves are designed to self-destruct in eighteen months and our handheld media devices, cell phones, and computers, become obsolete in three to five years, even though they continue to do what they did when we purchased them originally. As a culture, most if not all of us have bought into the idea of buying now even if we have to do it on credit, rather than waiting for when we can actually afford the purchase.

This "consumerism" affects us as a nation and as a culture. It keeps our businesses running and our people employed. It has led to many new technological innovations that not only make life easier but facilitates the teaching of the gospel world-wide. There have also been negative affects to this consumerism. Many of these new products are depleting our natural resources making them more expensive and us more dependent on foreign sources of oil, people are manipulated through advertising and

peer pressure to go into debt and even participate in activities harmful to their spiritual and physical health, and this consumerism often results in the exploitation of those who make the products we buy in sweatshops and factories in developing countries around the world.

How do the following terms relate to consumer culture?

1. Buying on credit
2. Buying things you don't need, with money you don't have
3. Garbage
4. Fad buying
5. Conspicuous consumption
6. Exploitation of labor consumption of natural resource
7. Increase production
8. Competition leads to better product,
9. Entrepreneurial creativity

Woe unto them that call evil good, and good evil, that put darkness for light, and light for darkness, bitter for sweet, and sweet for bitter. 2 Nephi 15:20

Behold, verily, thus saith the Lord unto you: In consequence of evils and designs which do and will exist in the hearts of conspiring men in the last days, I have warned you, and forewarn you, by giving unto you this word of wisdom by revelation-- D&C 89:4

3. What is the definition of a consumer culture? How does it affect you personally? How does it affect America? How does it affect the church? How do the principles of Agency and Accountability, Rights, and Rule of Law apply to consumerism?

Advances in technology have increased both the speed with which businesses and consumers make decisions and the number of markets in which they participate. Computers are only one modern example of this principle, many others could be cited both from the past and present. These advances have changed the way Americans communicate, enter the marketplace, and engage in international trade.

How do the following terms relate to technological advances and the American marketplace?

1. Cell Phone
2. Internet
3. Outsourcing
4. Paperless banking
5. Internet stock trading
6. Email
7. Telegraph
8. Pony express
9. Rural free delivery
10. Telephone
11. Railroad
12. Airplane
13. Fax machine
14. UPS, Federal Express, DHL
15. Trucking
16. Interstate highways

4. How do the above terms relate to technological development and the way people do business in America? Are there others you could add? What affects have these technological developments had on international trade and relations?

America, like all industrial nations of the world, has **transitioned through multiple economic phases**. Prior to the arrival of Europeans, Native American culture was based primarily of hunting and gathering. With the arrival of the Europeans society came to be based on **settled agriculture**. Prior to 1920 more than 50% of Americans made their living from agriculture. Today less than 2% of Americans make their living from agriculture. Agricultural practices and methods changed and developed over time, and agriculture as the basis of society was eventually supplanted by an **industrial economy** and all of the changes in daily life that that entailed. America once led the world in oil and steel productions, but today, most of the steel used in America comes from overseas as does most of the oil. America's industrial based economy has been replaced by what some refer to as a **service/information economy**. Today, even some of the most basic aspects of the service/information economy is being outsourced to countries like India.

5. Can you give specific examples of this economic transition in America? How has this transition affected culture in America? How has this transition affected your family and its history?

There are several examples of **how technology has affected American life and culture**. Computers have certainly changed the way we communicate, learn, and play. Of all the technological developments, computers may be the most "personal" since we invite them into our backpacks, offices, homes (even bedrooms) and interact with them everyday. Another example of how changing technology has affected our culture is transportation. Although we do not invite transportation into our homes (unless you count long boards) most all of us interact with transportation daily and how we transport ourselves and our goods and services has definitely affected our culture. And when you consider the long view of transportation development from the horse and carriage, through steam boats and railroads, to the automobile, it has also affected how we live.

Automobile manufacturing, like electrification, grew spectacularly in the 1920s. The automobile was a major factor in the postwar boom. It stimulated and transformed the petroleum, steel, and rubber industries; it forced the construction and upgrading of streets and highways at the cost of millions of dollars for labor and concrete. From the beginning, the United States loved autos. There were nearly 1 million autos in 1912, and in the 1920s, autos came within the reach of the middle class. In 1929, Americans purchased 4.5 million cars, and by the end of that year, nearly 27 million were registered. The roads, mostly maintained by state and local governments, were often poor and downtown sometimes impassable.

The auto created new suburbs and allowed families to live miles from work. Gasoline stations, diners, and tourist courts (forerunners of motels) became familiar landmarks on the American scene. But there was an environmental downside as oil and gasoline contaminated streams, piles of old tires and rusting hulks of discarded cars began to line the highways, and emissions from thousands and then millions of internal combustion engines fouled the air.

The auto transformed American life in other ways. Small crossroads stores and many small churches disappeared as rural families drove into town. Buses began to eliminate the one-room school, and the tiny rural church began to disappear. Autos also changed courting habits by allowing young people to escape the watchful eyes of their parents.

The automobile became a sign of status, advertising made it the symbol of the good life, sex, freedom, and speed. The auto transformed advertising and altered the way products were purchased. By 1926, three-fourths of the cars sold were bought on some kind of deferred-payment plan, and "buy now, pay later" was soon used to sell other consumer products; thus adding to the development of a consumer culture. The auto industry, like most American businesses, consolidated. In 1908, more than 250 companies were making automobiles in the United States. By 1929, only 44 remained. But one name became synonymous with the automobile itself—Henry Ford.

Ford had a reputation as a progressive industrial leader and champion of ordinary people. As with all men and women who become symbols, the truth is less dramatic. For example, his famous assembly line was invented by a team of engineers. Introduced in 1913, it cut production time for a car from 14 hours to an hour and a half. The product of this carefully planned system was the Model T, the prototype of the inexpensive family car. By contrast, most European cars were custom made.

In 1914, Ford startled the country by increasing the minimum pay of the Ford assembly-line worker to \$5 a day (almost twice the national average pay for factory workers). Ford was not a humanitarian. He wanted a dependable work-force and knew that skilled workers were less likely to quit if they were well paid. Ford was one of the first to appreciate that workers were also consumers who might buy Model Ts. But despite the high wages, work on the assembly line was numbing, and when the line closed down, workers were released without compensation.

The Model T, which cost \$600 in 1912, was reduced gradually in price until it sold for only \$290 in 1924. Except for adding a self-starter, offering a closed model, and making a few minor face-lifts, Ford kept the Model T in 1927 as he had introduced it in 1909. By that time, its popularity had declined as many people traded up to sleeker, more colorful, and, they thought, more prestigious autos put out by Ford's competitors.

The American middle class traveled at an increasing rate after the low point of 1932 and 1933. In 1938, the tourist industry was the third largest in the United States, behind only steel and automobile production. Just as cars and roads transformed America in the 1920s when mass production came of age, so they contributed to the equally great transformation three decades later. Limited to the production of military vehicles during World War II, the auto industry expanded dramatically in the postwar period. Seventy thousand cars were made in 1945; 8 million were manufactured in 1955; and not quite 7 million were produced in 1960. Customers now chose from a wide variety of engines, colors, fancy styles, and optional accessories.

The development of a massive interstate highway system also stimulated auto production and so contributed to prosperity. Through the Interstate Highway Act of 1956, the Eisenhower administration poured \$26 billion, the largest public works expenditure in American history, into building over 40,000 miles of federal highways, linking all parts of the United States. Federal officials claimed the system would make evacuation quicker in the event of nuclear attack. President Dwight D. Eisenhower boasted that "the amount of concrete poured to form these roadways would build. . . six sidewalks to the moon. . . More than any single action by the government since the end of the war, this one would change the face of America." Significantly, this massive effort helped create a nation dependent on oil.

As much as the development of the automobile has changed American culture, a brief comparison of the automobile and computers may be interesting.

"If cars had progressed as rapidly as computers, a Rolls Royce today would:

1. cost \$2.75
2. get 3 million miles per gallon
3. have enough power to propel the Queen Elizabeth II
4. fit six on the head of a pin"¹

6. How has technological development affected American culture? How has it, does it, affected your life? How has it affected the church?

All of this advancement in technology has also affected **the way we view our basic rights** and how those rights are interpreted and protected by the government. Some of the rights that are most often involved are things like the rights to privacy and freedom of speech, but there are others. Some of the

¹ From Paul Johnson, MODERN TIMES: THE WORLD FROM THE TWENTIES TO THE EIGHTIES (New York: Harper and Row, 1983), pp. 128-9Quoted in THE HUMANITIES IN WESTERN CULTURE, 10th edition volume 2, Robert C. Lamm copyright 1996 page 361.

possible issues relating to technology and rights are internet pornography, electronic record keeping, wire tapping, and identity theft.

7. What other issues relating to technology and rights can you identify? How do, have, developments in things like the telephone, cell phone, and the internet, affect our basic rights as Americans? How have your basic rights been affected by changes in technology? How do these effects relate to the issues of Agency and Accountability, Rights of Man, and Rule of Law discussed in Topic 1?

[NB: Some of the material herein may be the work of Gary Marshall and Eric Walz. Marshall's content may appear in a forthcoming publication.]