# The Magnificence of Man

# RUSSELL M. NELSON

I invite you to ponder things magnificent. To assist, let us define the word *magnificent*. It is derived from two Latin roots. The prefix *magni* comes from a term meaning "great." The suffix comes from the Latin *facere*, meaning "to make" or "to do." A simple definition of *magnificent* then might be "great deed" or "greatly made."

Think, if you will, of the most magnificent sight you have ever seen. It could be a meadow in springtime filled with beautiful wildflowers. Or perhaps you have been awestruck, as I have, at the magnificence of a single rose with its special beauty and perfume. I have come to appreciate the magnificence of an orange each droplet of juice neatly packaged in an edible container, joined with many other packets, grouped in sections, and all neatly wrapped in a disposable, biodegradable peel.

Some would say the most magnificent sight they have ever beheld is looking heavenward on a summer night, seeing stars beyond number dotting the sky. Those who have traveled in orbit through space say that their view of planet earth was one of the most magnificent sights ever observed by man. Some might choose the view of the Grand Canyon at sunrise—others, the beauty of a mountain lake, river, waterfall, or desert.

Some might select a peacock with its tail in full fan or a handsome horse. Others would nominate the beauty of butterfly wings, or a hummingbird seemingly suspended in midair while feeding.

These magnificent sights are wondrous beyond measure. They are all "great deeds" of our divine Creator.

You may be surprised at what I am going to suggest now. Ponder the magnificence of all you see when you look in the mirror. Ignore the freckles, unruly hair, or blemishes, and look beyond to see the real you—a child of God created by him, in his image.

Tonight I would like to peek beyond the surface we see in the mirror, lift the lid on the treasure chest of understanding the marvelous

Russell M. Nelson was a member of the Quorum of the Twelve Apostles of The Church of Jesus Christ of Latter-day Saints when this devotional address was given at Brigham Young University on 29 March 1987. attributes of your body, and discover, at least in part, the magnificence of man.

Time won't permit us to do more than sample some of the glittering jewels of magnificence in this treasure chest, but we might reach in and look at some of the gems awaiting our view.

#### **Embryonic Development**

In the first compartment of the treasure chest, we might look at the magnificence of our creation itself.

We don't know precisely how two germ cells unite to become a human embryo, but we do know that both the female cell and the male cell contain all the new individual's total hereditary material and information, stored in a space so small it cannot be seen by the naked eye. Twenty-three chromosomes from both the father and the mother unite in one new cell. These chromosomes contain thousands of genes. A marvelous process of genetic coding is established by which all the basic human characteristics of the unborn person are determined. A new DNA complex is thus formed. A continuum of growth is instituted that results in a new human being. Approximately twenty-two days after those two germ cells have united, a little heart begins to beat. At twenty-six days the circulation of blood begins. Cells multiply and divide, some becoming differentiated to become eyes that see, or ears that hear, while others are destined to become fingers that feel the wonderful things about us. Yes, awareness of the magnificence of man begins with the miracles of conception and our creation.

#### Specific Organs

In our treasure chest of understanding, we can look to the compartment of capability of selected organs. Time won't permit complete consideration, but each jewel merits admiration, appreciation, and awe. Let's mention the magnificence of the eyes with which we see. No doubt you have stood before the mirror, as have I, watching pupils react to changes in the intensity of light—dilating to let more light in, constricting to reduce the light allowed to reach the sensitive retina of the eye. A self-focusing lens is at the front of each eye. Nerves and muscles synchronize the function of two separate eyes to produce one three-dimensional image. Eyes are connected to the brain, ready to record sights seen. No cords, no batteries, no external connections are needed; our visual apparatus is marvelous—infinitely more priceless than any camera money can buy.

As we admire good stereophonic equipment for sensing sound, ponder the magnificence of the human ear. It is so remarkable. Compacted into an area about the size of a marble is all the equipment needed to perceive sound. A tiny tympanic membrane serves as the diaphragm. Minute ossicles amplify the signal that is then transmitted along nerve lines to the brain, which registers the result of hearing. This marvelous sound system is also connected to the recording instrument of the brain.

A large portion of my life's study and research has been focused on the jewel of the human heart—a pump so magnificent that its power is almost beyond our comprehension. To control the direction of the blood's flow through the heart, there are four important valves, each pliable as a parachute and delicate as a dainty silk scarf. They open and close over 100,000 times a day—over 36 million times a year. Yet, unless altered by disease, they are so rugged that they stand this kind of wear seemingly indefinitely. No man-made material developed thus far can be flexed this frequently and for so long without breaking.

The amount of work done by the heart is most amazing. Each day it pumps enough fluid to fill a 2,000-gallon tank car. The work it performs daily is equivalent to lifting a 150-pound man to the top of the Empire State Building, consuming only about four watts of energy—less than that used by a small light bulb in your home.

At the crest of the heart is an electrical generator transmitting energy down special lines, causing myriads of muscle fibers to beat in coordination and in rhythm. This synchrony would be the envy of the conductor of any orchestra.

All this power is condensed in this faithful pump—the human heart—about the size of one's fist, energized from within by an endowment from on high.

One of the most wondrous of all jewels in this treasure chest is the human brain with its intricate combination of power cells, recording, memory, storage, and retrieval systems. It serves as headquarters for the personality and character of each human being. As I observe the lives of great individuals, I sense that the capacity of the brain is seemingly infinite. Wise men can become even wiser as each experience builds upon previous experience. Indeed, continuing exercise of the intellect brings forth increased intellectual capacity.

Each time I marvel at a computer and admire the work it can do, I respect even more the mind of man that developed the computer. The human brain is certainly a recording instrument that will participate in our judgment one day as we stand before the Lord. The Book of Mormon speaks of a "bright recollection" (see Alma 11:43) and of a "perfect remembrance" (see Alma 5:18) that will be with us at that time. Each one of us carries that recording instrument guarded within the vault of the human skull.

As we symbolically sift through the treasure chest of understanding, we could spend hours, even a lifetime, studying the incredible chemical capacity of the liver, the kidneys, and any or all of the endocrine and exocrine glands of the body. Each is a shimmering jewel, worthy of our study and our deepest gratitude.

# **Conceptual Considerations**

Now let us turn our attention to jewels in another compartment in the treasure chest of understanding, leaving behind those representing the marvelous functions of each specific organ. Let us consider some concepts that bridge beyond individual organ systems.

The first concept that I would mention is that of reserve, or backup. In the theater, major actors have understudies. In electrical instruments, backup in the event of power failure may be provided by batteries. In the body, think of the backup provided by a number of organs that are paired, such as the eyes, ears, lungs, adrenal glands, kidneys, and more. In the event of illness, injury, or loss of one, the other is there ready to keep our bodily functions intact. In the event of loss of sight or hearing altogether, other sensory powers become augmented in a miraculous manner.

Some backup systems are not so apparent. For example, crucial single organs like the brain, the heart, and the liver have a double blood supply. They are all nourished by *two* routes of circulation, minimizing damage in the event of loss of blood flow through any *single* blood vessel.

Another dimension of backup I shall describe as collateral pathways. For example, if our nasal passageways are obstructed by a "stuffy nose," we may breathe through our mouths. Similarly, collateral pathways may grow in the event of obstruction or severance of blood vessels or nerves.

Consider another concept—that of selfdefense of the body. I watched some threeyear-old children playing one day. I saw them lapping water from the sidewalk after it had spilled through a neighbor's garden. I suppose the germs they ingested were incalculable in number, but not one of those children became ill. They were defended by their bodies. As soon as that dirty drink reached their stomachs, hydrochloric acid went to work to purify the water and protect the lives of those innocent children.

Think of the protection provided by the skin. Could you make, or even conjure in your mind how to create a cloak that would protect you and yet, at the same time, perceive and warn against injuries that excessive heat or cold might cause? That is what the skin does. It even gives signals indicating when another part of the body is ailing. The skin can flush and sweat with fever. When one is frightened or ill, the skin pales. When one is embarrassed, the skin blushes. And it is replete with nerve fibers that communicate and often limit possible harm through perception of pain.

Pain itself is part of the body's defense mechanism. For example, protection is provided by sensory areas of the mouth guarding the delicate esophagus, which has very few nerve fibers. Like a sentinel, the mouth receives warnings to protect the tender esophagus from becoming burned by drinks that are too hot.

The defense of the body includes chemical antibodies manufactured in response to infections acquired along life's way. Each time we are exposed to bacterial or viral infections, antibodies are made that not only combat infection but persist with memory to strengthen resistance in days to come. When military conscription was required during World War II, soldiers who had come from isolated rural areas had much less immunity and were more prone to infections than were those from more highly populated urban areas whose resistance was better developed.

Closely related to the concept of self-defense is that of self-repair. Consider the fact that broken bones mend and become strong once again. If I were to break one of the legs of the chair I was just sitting on, how long would we have to wait for that chair leg to heal itself? It would never happen. Yet many here tonight walk on legs that once were broken. Lacerations in the skin heal themselves. A leak in the circulation system will seal itself, but circulatory systems outside the body do not have this power. I gained appreciation for this miracle early in my research career when I was working in the laboratory to create an artificial heart-lung machine. Whenever tubing in that machine would spring a leak, it meant long hours cleaning up the lab, and I came home late for dinner. Never did a leak in the artificial heart-lung machine ever seal itself.

The concept of self-renewal is remarkable. Each cell in the body is created and then regenerated from elements of the earth according to the recipe or formula contained within genes unique to us. The average red blood corpuscle, for example, lives about 120 days. It then dies and is replaced by another. Each time you bathe, thousands of dead and dying cells are scrubbed away to be replaced by a younger crop. To my thinking, this process of selfrenewal prefigures the process of resurrection.

Another concept that is truly remarkable is that of autoregulation. In spite of wide fluctuations in the temperature of man's environment, the temperature of the body is carefully controlled within very narrow bounds.

Have you wondered why you can't swim under water very long? Autoregulation limits the time you can hold your breath. As breath is held, carbon dioxide accumulates. Partial pressure of carbon dioxide is monitored continuously by two carotid bodies situated in the neck. They transmit signals up nerves to the brain. The brain then sends stimuli to muscles of respiration, causing them to work so that we might inhale a fresh supply of oxygen and eliminate retained carbon dioxide. This is but one of many, many servomechanisms that autoregulate individual ingredients in our bodies.

The number of these systems exceeds our ability to enumerate them. Sodium, potassium, water, glucose, protein, nitrogen are but a few of the many constituents continuously monitored by chemical regulators within our bodies. Consider the concept of adaptation. People on the earth dwell amidst climatic and dietary differences of vast scope. Eskimos in the Arctic Circle consume a diet with a large component of fat that is acceptable and even necessary to sustain life in a very cold climate. The Polynesian, on the other hand, eats a diet provided by a tropical environment. Yet these different groups work and adapt to varying conditions and diet available to them.

The concept of identity in reproduction is marvelous to contemplate. Each one of us possesses seeds carrying our unique chromosomes and genes that control our own specific cellular identity. For this reason, tissues surgically transplanted from one person to another can only survive by suppressing the host's immune response that clearly recognizes tissues foreign to one's own inherited genetic formula. Truly we are blessed with the power to have children born in the likeness of parents on earth as well as in heaven.

As we consider self-defense, self-repair, and self-renewal, an interesting paradox emerges. Limitless life could result if these marvelous qualities of the body continued in perpetuity. Just think, if you could create anything that could defend itself, repair itself, and renew itself without limit, you could create perpetual life. That our Creator did with the bodies he created for Adam and Eve in the Garden of Eden. If they had continued to be nourished from the tree of life, they would have lived forever. According to the Lord, as revealed through his prophets, the fall of Adam instituted the aging process, which results ultimately in physical death. Of course, we do not understand all the chemistry, but we are witnesses of the consequences of growing old. This, and other pathways of release, assure that there is a limit to the length of life upon the earth.

Yes, troubles do develop in our bodies that do not repair themselves with time. To the skilled physician, this profound question is posed by each sick patient seen: "Will this illness get better, or will it get worse, with the passage of time?" The former needs only supportive care. The latter requires significant help to convert the process of progressive deterioration to one that might improve with time.

Death, when it comes, generally seems to be untimely to the mortal mind. Then we need to have the larger view that death is part of life.

It was not expedient that man should be reclaimed from this temporal death, for that would destroy the great plan of happiness. [Alma 42:8; see also D&C 29:43]

When severe illness or tragic injuries claim an individual in the flowering prime of life, we can take comfort in this fact: The very laws that could not allow life to persist here are the same eternal laws that will be implemented at the time of the resurrection, when that body "shall be restored to [its] proper and perfect frame" (Alma 40:23).

Thoughts of life, death, and resurrection bring us to face crucial questions. How were we made? By whom? And why?

# Created by God

Through the ages, some without scriptural understanding have tried to explain our existence by pretentious words such as *ex nihilo* (out of nothing). Others have deduced that, because of certain similarities between different forms of life, there has been a natural selection of the species, or organic evolution from one form to another. Still others have concluded that man came as a consequence of a "big bang" that resulted in the creation of our planet and life upon it.

To me, such theories are unbelievable! Could an explosion in a printing shop produce a dictionary? It's unthinkable! But it could be argued to be within a remote realm of possibility. Even if that could happen, such a dictionary could certainly not heal its own torn pages, or renew its own worn corners, or reproduce its own subsequent editions!

We are children of God, created by him and formed in his image. Recently I studied the scriptures simply to find how many times they testify of the divine creation of man. Looking up references that referred either to *create* or form (or their derivatives) with either man, men, male, or female in the same verse, I found that there are at least fifty-five verses of scripture that attest to our divine creation (Genesis 1:27; 2:7, 8; 5:1, 2; 6:7; Deuteronomy 4:32; Isaiah 45:12; Malachi 2:10; Mark 10:6; Romans 9:20; Ephesians 3:9; Colossians 3:10; 2 Nephi 1:10; 2:15; 9:6; 29:7; Jacob 4:9; Mosiah 4:2, 9; 7:27; Alma 1:4; 18:32, 34, 36; 22:12, 13; Mormon 9:12, 17; Ether 1:3; 3:15, 16; Moroni 10:3; D&C 20:18; 29:30, 34; 77:2; 77:12; 93:29; Moses 1:8; 2:27; 3:5, 7, 8, 9; 6:8, 9; 7:32; 8:26; Abraham 4:26, 27; 5:7, 8, 14, 16). I have selected one to represent all those verses that convey the same conclusion:

And the Gods took counsel among themselves and said: Let us go down and form man in our image, after our likeness....

So the Gods went down to organize man in their own image, in the image of the Gods to form they him, male and female to form they them. [Abraham 4:26, 27]

# **Spiritual Discernment**

I believe all of those scriptures pertaining to the creation of man. But the decision to believe is a spiritual one, not born solely by an understanding of things physical:

But the natural man receiveth not the things of the Spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned. [1 Corinthians 2:14]

It is incumbent upon each informed and spiritually attuned person to help overcome such foolishness of men who would deny divine creation or think that man simply evolved. By the spirit we perceive the truer and more believable wisdom of God.

With great conviction I add my testimony to that of my fellow apostle, Paul, who said:

Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you? If any man defile the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are. [1 Corinthians 3:16, 17]

#### **Duality of Man**

The Lord said that "the spirit and the body are the soul of man" (D&C 88:15). Each one of us therefore is a dual being—a biological (physical) entity, and an intellectual (spiritual) entity. The combination of both is intimate throughout mortality.

In the beginning, man, as that intellectual entity, was with God. Our intelligence was not created or made, nor can it be (see D&C 93:29).

That spirit, joined with a physical body of such remarkable qualities, becomes a living soul of supernal worth. The Psalmist so expressed this thought:

When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained;

What is man, that thou art mindful of him? ... For thou hast made him a little lower than the angels, and hast crowned him with glory and honour, [Psalms 8:3–5]

Why were we created? Why are we here? Why are we upon the earth?

God has made it plain over and over again that the world was made for mankind to exist. We are here to work out our divine destiny, according to an eternal plan presented to us in the great council of heaven. Our bodies have been created to accommodate our spirits, to allow us to experience the challenges of mortality.

# Avoid Desecration of the Physical Temple

With this understanding, it is pure sacrilege to let anything enter the body that might defile this physical temple of God. It is irreverent to let even the gaze of our precious eyesight or the sensors of our touch or hearing supply the brain with memories that are unclean and unworthy. Could any of us lightly regard precious seeds of reproduction—specifically and uniquely ours—or disregard the moral laws of God, who gave divine rules governing their sacred use?

Knowing we are created as children of God, and by him given agency to choose, we must also know that we are accountable to him. He has defined the truth and prescribed commandments. Obedience to his law will bring us joy. Disobedience of those commandments is defined as sin. While we live in a world that seems increasingly reluctant to designate dishonorable deeds as sinful, a scripture so warns: "Fools make a mock at sin: but among the righteous there is favour" (Proverbs 14:9).

No one is perfect. Some may have sinned grievously in transgressing God's laws. Mercifully, we can repent. That is an important part of life's opportunity as well.

Repentance requires spiritual dominion over appetites of the flesh. Every physical system has appetites. Our desires to eat, drink, see, hear, and feel respond to those appetites. But all appetites must be controlled by the intellect for us to attain true joy. On the other hand, whenever we allow uncontrolled appetites of the body to determine behavior opposed to nobler promptings of the Spirit, the stage is set for misery and grief.

Substances such as alcohol, tobacco, and harmful drugs are forbidden by the Lord. We have similarly been warned about the evils of pornography and unclean thoughts. Appetites for these degrading forces can become addictive. Physical or mental addictions become doubly serious because, in time, they enslave *both* the body and the spirit. Full repentance from these shackles, or any other yokes to sin, must be accomplished in this life while we still have the aid of a mortal body to help us develop self-mastery.

When we truly know our divine nature, our thoughts and behavior will be more appropriate. Then we will control our appetites. We will focus our eyes on sights, our ears on sounds, and our minds on thoughts that are a credit to our physical creation as a temple of our Father in Heaven.

In daily prayer we may gratefully acknowledge God as our Creator, thank him for the magnificence of our physical temple, and then heed his counsel.

#### More Yet to Learn

Though we cannot fully comprehend the magnificence of man, in faith we can continue our reverent quest. We may join with Jacob in this marvelous declaration:

Behold, great and marvelous are the works of the Lord. How unsearchable are the depths of the mysteries of him; and it is impossible that man should find out all his ways....

For behold, by the power of his word man came upon the face of the earth, which earth was created by the power of his word....

Wherefore, brethren, seek not to counsel the Lord, but to take counsel from his hand. [Jacob 4:8–10]

For years I have attended scientific meetings of learned societies. Medical scientists and practitioners by the thousands participate in such assemblies annually from all over the world. The quest for knowledge is endless. It seems that the more we know, the more there is yet to learn. It is impossible that man may learn all the ways of God. But as we are faithful and are deeply rooted in scriptural accounts of God's magnificent creations, we will be well prepared for future discoveries. All truth is compatible because it all emanates from God.

## **Beware of False Doctrine**

Of course, we know that "there is an opposition in all things" (2 Nephi 2:11). In the world even many so-called "educators" teach contrary to divine truth. Be mindful of this prophetic counsel:

O the vainness, and the frailties, and the foolishness of men! When they are learned they think they are wise, and they hearken not unto the counsel of God, for they set it aside, supposing they know of themselves, wherefore, their wisdom is foolishness and it profiteth them not. And they shall perish.

But to be learned is good if they hearken unto the counsels of God. [2 Nephi 9:28–29]

You need not be reminded that the work and glory of the Lord are opposed by forces of Satan, who is the master of deceit. Many follow his teachings. Remember,

Man may deceive his fellow-men, deception may follow deception, and the children of the wicked one may have power to seduce the foolish and untaught, till naught but fiction feeds the many, and the fruit of falsehood carries in its current the giddy to the grave. [JS–H 1:71 footnote]

Be wise and keep away from temptations and snares. Cautiously avoid "foolish and hurtful lusts, which drown men in destruction and perdition" (1 Timothy 6:9). *Flee these things; and follow after righteousness, godliness, faith, love, patience, meekness.* 

*Fight the good fight of faith, lay hold on eternal life.* [1 Timothy 6:11–12]

#### **Spiritual Dominion**

The magnificence of man is matchless. Remember, glorious as this physical tabernacle is, the body is designed to support something even *more* glorious—the eternal spirit that dwells in each of our mortal frames. The great accomplishments of this life are rarely physical. Those attributes by which we shall be judged one day are spiritual. With the blessing of our bodies to assist us, we may develop spiritual qualities of honesty, integrity, compassion, and love. Only with the development of the spirit may we acquire "faith, virtue, knowledge, temperance, patience, brotherly kindness, godliness, charity, humility, [and] diligence" (D&C 4:6).

Pattern your lives after our great Exemplar, even Jesus the Christ, whose parting words among men included this eternal challenge: "What manner of men ought ye to be?... even as I am" (3 Nephi 27:27).

We are sons and daughters of God. He is our Father; we are his children. Our divine inheritance is the magnificence of man. May we honor it and magnify it, I pray in the name of Jesus Christ. Amen.