

How We Become Who We Are

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It is indeed an honor to have been awarded this year's Nathalie Barr lectureship. As you are now aware, I am no longer a practicing hand therapist. I look back at the many years that I did and realize how rewarding of an experience it was. I learned so much about life from many of you, my patients, and my mentors in hand therapy. The constant learning and problem-solving approach I adopted shaped my thought process. Treatment planning—the initial plan based on historical perspectives and science, the constant reassessment, and the modifications to reach a goal—was a great teacher for me in my current pursuits in the business of health care. As you will see in the conclusion of my presentation, there are many lessons I learned from hand therapy that transcend the business world.

My career has gone quite in a different direction the last several years. While I loved being a hand therapist, I realized that I have other interests, too. I chose a career in health care management because I had achieved

the goals I set for myself in the rehabilitation world—patient care, research, education, and mentorship—and felt like through management, I could influence the health care received by so many more than I could individually. Turns out, I'm pretty good at it. The demand for clinical excellence in health care is high. Equally high is that for management excellence, and more and more pathways opened for me in this arena. I have worked in not-for-profit and private practice settings, and for publicly held companies. After devoting ten years to a company with which I felt ultimately deceived and betrayed by the lack of ethics and greed of a few people at the top, I have found my way to my current company, Alliance Imaging. Diagnostic imaging is a fascinating sector of health care. I am very excited about the future of this technology but equally intrigued by the challenges of providing superior patient care and very capital-intensive equipment in an environment where reimbursement continues to shrink. I have found a home with Alliance; our company is customer-focused and holds highly the values of quality, integrity and ethics, respect, teamwork, and accountability.

But the American Society of Hand Therapists represents my roots and is an organization of which I am so very fond and so proud. I have attended the annual meeting of our organization for 20 straight years—I have learned so much along the way. It was 10 years ago that I presided over this meeting as president, and I spent 10 years on the Board of Directors prior to that. Many of my proudest moments are the accomplishments we achieved as a group during that time. Thank you again for this honor.

The title of my Nathalie Barr Lecture is, "How We Become Who We Are." I thought about calling it, "What I want to be when I grow up," but I couldn't! I'm not sure I've grown up and most certain that I don't yet know what I want to be.

I want to begin by acknowledging the founders of our Society—Bonnie Olivett, Judy Bell-Krotoski, Evelyn Mackin Henry, Mary Kasch, Pegge Carter, and Karen Lauckhardt—and all of the current and past board members and volunteers. Had they not become who they are, we would not have been able to benefit from this marvelous organization.

Today, in addition to hearing me, I will be using some supporting cast members and music, and share the responses from many of our colleagues to this question, "Who or what influenced you to become a hand therapist?" You will see their responses projected on the screen during my presentation. The music I have chosen as a background is also designed to enhance the presentation and your experience—I hope you like the selections. I am fond of so many types of music. Music has enriched and shaped my life—it is truly a gift from God.

Life is a waterway upon which we travel—ebbing and flowing, its tributaries and ultimate destination becoming the body of knowledge that directs our lives. With our genetic makeup, the influence of our environment, and the people we meet along the way, one must ask: Is it chance or is it destiny? Every day, we make choices—choices that determine our next step in the journey. Or is it simply fate? Perhaps we have no say in our lives; there is no free will. Every religion teaches that there is a predetermined plan with which

we are born and upon which we follow. Most of us believe that there *are* choices. Children are asked, "What do you want to be when you grow up?" "Rich man, poor man, beggar man, thief ... doctor, lawyer, Indian chief ... tinker, tailor, cowboy, sailor." What motivates us? Do you believe that our lives are but an existence that is carved out of time? Or maybe you believe that our spirits travel from one time and space to another. Are we reincarnated? Do you believe *déjà vu* is an experience from a past life? What becomes of us when we leave this earth and what will people remember about our lives? Who will we influence, who will we help along the way? How do we choose our mentors, our friends, our mates? Do you believe in luck? Maybe you believe that life is just a series of pain-avoidance situations?

My presentation today will explore these questions and many others. It is a philosophical and scientific, and sometimes humorous, look at our life experiences. The dynamics of life, the role and influence of people and events, where we start and how we get there, all have been areas of interest to me and the source of many hours of study. It grew out of an interest in history and literature, biographies, and has grown to include philosophy, leadership theory, and "self-help" books. The less knowledge we have about a topic, the more that is written—and there are literally hundreds of theories and thousands of pages of text written about the meaning of life. From Sigmund Freud to Dr. Phil, bartenders, sportscasters, and writers for sitcoms all have their perspective. That is what makes this topic so interesting.

I am blessed to have been influenced by my parents and teachers, chance meetings with strangers, lifelong friends, my wife and children, and many of you. Who was the first person to teach you a lesson? Perhaps you remember the exact place you were when you heard that President Kennedy, or Martin Luther King, or John Lennon was killed? Or when man landed on the moon for the first time? Or 9/11? I believe incidents, places, and experiences can change the direction of our lives—or at least our perception of life. My life has been changed by many events as well

as people: being present for the birth of our children, the first time I saw *Phantom of the Opera*, witnessing the Grand Canyon, reading the *Lord of the Rings*, experiencing a Metallica concert!

My hope is that my presentation today will have meaning for you. I have no delusion that it will change your life. If you leave this morning more thoughtful about life, with your spirits lifted and having had some fun along the way, I will have accomplished my goal.

The limitations of my presentation are many and assumptions few. I will ask that we be mindful of the good fortune we have to be here and recognize that a limitation in my presentation today of how we become who we are, are those in our world whose lives are dominated by events that challenge basic survival such as war, famine, slavery, and starvation as there is an entirely different set of dynamics in such dismal situations that they overwhelm all other behavior. Being the smart guy that I am, I also will not be discussing religion or politics—although both have a profound effect on our lives.

My Nathalie Barr lecture is dedicated to my friend and professional mentor, Georgiann Laseter. She has been the most influential person in my professional life. As a young therapist in Abilene, Texas, I had been taken under the wing of a local hand surgeon, Don Wehmeyer, MD. Dr. Wehmeyer taught me to be a perfectionist. He would send patients back to me after I made their splint to adjust wrist position by 5 degrees. I received a call from Georgiann one day, and she asked if I would take over the care of one of her patients. Of course, Georgiann was already a legend to me. President of the Texas OT Association, she was in my mind the quintessential therapist and one of the few "specialists" in hand therapy at that time in Texas. Dorit Aaron and Barbara Rose had their clinics in Houston, Missy Donnell and Mo Syler in Austin, Sylvia Davila in San Antonio, and Mary Ann Appleby and Georgiann in Dallas were the only ones I knew or knew of.

I will never forget the day her patient showed up in my clinic. The splint she was wearing—a simple wrist cock-up—was awesome! I studied that splint and made up my mind

that I was always going to make splints from that day forward that emulated her perfection. Later, I spent a day seeing patients with Georgiann at her clinic in Dallas and found her science and knowledge of the hand was only surpassed by her passion for the care she afforded her patients.

Georgiann was my sponsor back in the days when one "applied" to become a member of ASHT. As president, she appointed me to my first ASHT board position. I spent the night before the inaugural hand therapy certification examination at her home—we started studying, but after about an hour, in typical Georgiann fashion, she announced that if we didn't know it by then we weren't going to. So we opened a bottle of wine.

When I asked Georgiann to tell me what or who influenced her to become a hand therapist, she related a story familiar to all of us of being taken under the wing of a hand surgeon, going to the operating room, developing protocols. But more importantly, she shared the benefits of this experience: "Although I am proud of a CV with a long list of professional accomplishments, activities, and awards, I've always felt that one does what's right for the patients and the profession. I've never expected any awards or felt a sense of 'power' in a leadership role. If you are helping the profession, you are helping your patients because you become a better therapist. Encouraging others to work toward a common purpose builds skills and sparks vision. The biggest bonuses are the long-lasting relationships and true friendships that develop, grow, and mature. Frankly, I would have spent the thousands of hours of volunteer time in professional activities for nothing else than that, but happily you become a better therapist, a more skilled communicator, help build your profession AND you get great friends!"

Thank you for those words of inspiration, Georgiann—and thanks for being who you are.

So, let's get started in this review of "How we became who we are."

I recently attended our oldest daughter's college graduation. As always, this setting was fascinating—I guess someone has to get her degree

in anthropology with a minor in German! Students, achieving a goal, how did they get there? Where will they go? A family sitting near us shared that their son graduating that day was the first in their family to do so. Was he smarter than others in his family, or luckier? Or had he simply taken advantage of an opportunity—a path—and had the motivation and vision to set a goal and achieve it. Rarely does someone achieve success without the motivation or sacrifice of another.

There are indeed so many aspects to this complex study, but because of time restraints, I must focus my presentation on just a few. My thesis is that we do indeed have a predetermined path based on our potential, but that path is not a straight road. We have many opportunities to explore the passages and the choices we make determine who we are and what we become. In this presentation, I will focus on nature versus nurture:

1. Genetics and theories of personality development
2. How environmental factors influence us during the stages of our lives
3. Finally, I will present some thoughts about an area of keen interest of mine—our careers and how we choose them.

Close your eyes and imagine all the millions of coincidences that had to happen for you to find yourself in your seat in Charlotte on this morning. Your very conception is a miracle! Your genetic makeup, influences, and choices you have made are but a few of the hundreds of thousands of happenstance events that contributed to this event. Now think of those sitting around you. The same chance events contributed to their life and choices. When you add up the combinations and permutations, it is indeed a miracle—an exponential phenomenon.

We have many “selves.” We are a man or a woman, a son, a daughter, a mother, a father, a brother, sister, a husband, a wife. Our roles in life—a volunteer, a friend, a therapist—define who we are. In *As You Like It*, Shakespeare wrote, “All the world’s a stage, And all the men and women merely players: They have their exits and their entrances; And one man in

his time plays many parts....” We benefit from evolution—the collective wisdom of our ancestors is passed from generation to generation.

I’d like to start my presentation by sharing a story with you about one of those chance meetings I mentioned in my introduction that changed my life. I have flown on commercial airlines well over two million miles. While I love the opportunity to watch and meet people, I am often too busy to interact. However, on one memorable plane ride on the way home from an ASHT board meeting years ago, I met someone who taught me a very valuable lesson. I was writing a couple of thank you notes to committee members and he leaned over to me and said, “That’s really high touch.” It was so incredibly ironic because we had just had a facilitator at our meeting and had been discussing the challenges in health care as finding a balance between high tech and high touch. So you can imagine my surprise.

After talking literally nonstop for the whole flight, he finally looked over at me and said, “You know, Jim, there are two characteristics that all successful people share: integrity and self-discipline. Everyone who fails, fails in one of these two regards.” I have pondered those words for many years hence, and it is so true. Think of anyone you know who is failing to meet his or her potential and consider whether the rule is true. Perhaps this is the one thing that I share with you this morning that will make a difference in your life—as it has mine.

GENETICS

We arrive with a package. Our genetic makeup is the basis for who we become.

We all know something about genetics—the science of biologic variation. You can thank your parents not only for your hair color, but also your ultimate hair length, when you turn gray, when your hair falls out. More recently, research indicates that it seems you can also thank your heredity for your body’s ability to metabolize fats and carbs, your cholesterol count, and ability to lose weight. Among their many gifts, I would like to thank my mother for my CMC joint osteoarthritis and bun-

ions, my dad for my receding hairline. We spend millions and millions of dollars every year on hair color, and eye cream, and plastic surgery, contacts and hearing aids—all trying to atone for the aging process that naturally occurs in our genetic time clock.

I would like to explore with you briefly the history and some of the conclusions of this fascinating science.

Dr. Victor McKusick and his colleagues at The Johns Hopkins University School of Medicine have been cataloging human genes since the early 1960s. Their comprehensive work, *The Mendelian Inheritance in Man* (and now its online version OMIM), maps the genes and their variants currently known to exist. In 1865, Gregor Mendel published his work and the first description of genetic factors, or traits, through his work with the garden pea. He observed how some characteristics (later called genes by Johannsen in 1909) such as wrinkling, or lack thereof, were consistently passed along from generation to generation, while other characteristics such as pod shape were less consistent.

Genetic traits determine the observable characteristics of a cell or organism. These phenotypes form the basis for who we are. In human beings, you will remember, each cell contains 46 chromosomes—23 pairs of homologues, one homologue being donated by each of our parents. Homologues are related, containing the same genes in the same order in the chromosomes, but since the structure of each gene is subject to variation, the DNA molecules derived from the parents are not identical. These variant genes are known as alleles.

Genetic heterogeneity in a population of individuals is due to differences among the genes in their chromosomes. The 23 pairs of chromosomes are estimated to contain over 100,000 different gene pairs and the information carried by the DNA in these genes determines human inheritance and constitutes the human genome. It has been less than 50 years since the correct number of 46 human chromosomes was first determined. All cells of normal individuals have 22 pairs of autosomes and one pair of sex chromosomes: XX in the case of females, and XY in the case of males.

During growth and repair in the body, cells divide and replace themselves by mitosis, replicating the DNA sequences in cells generally in a constant manner from mother to daughter cell. This is important for genetic stability and is crucial for the proper functioning of an organism. However, for a species, such as human beings, to be able to adapt to a changing environment, it must be able to undergo genetic variation. This is how we evolve from generation to generation. The gene pool changes in response to the learning that occurs. Two important mechanisms insure that the genetic constitution, or genotype, of our species undergoes variation. One mechanism involves the random distribution of one member of each chromosome pair into one haploid gamete. As a result of this random distribution, each gamete receives a different mixture of maternal and paternal chromosomes. Because we contain 23 homologous pairs of chromosomes, each individual could theoretically produce at least 2^{23} (or about eight million) genetically different gametes.

The actual number is much greater than eight million because of the second mechanism, which involves a process of recombining chromosomes in a unique crossing-over that takes place during the long prophase of the first meiotic division. The crossovers recombine segments of DNA so that each gamete chromosome contains some genes derived from one parent and some from the other. This recombination allows large sections of the DNA double helix to move from one chromosome to another, but it does not normally change the arrangements of the genes in a chromosome. What it does permit, with the gametes from each parent, is different versions, or alleles, of a gene to occur in new combinations with other genes. This process leads to the variation in a population that can account for differences in the resistance of individuals to challenging changes in the environment.

HOW DO WE DEVELOP OUR PERSONALITY?

Our personalities are determined by our genetic basis, with the strong

influence of the environment in which we are reared. How else would one explain the difference that siblings exhibit, even from infancy? Yet despite all our gifts, the best intentions of others can be wasted if we do not allow ourselves their influence. Prospero ruminates in Shakespeare's *The Tempest*:

A devil, a born devil, on
whose nature
Nurture can never stick, on
whom my pains
Humanely taken, all, all
lost, quite lost.

Because behavior involves the functioning of the entire whole organism rather than the action of a single cell or organ, behavior is the most complex phenomenon to be studied. Unlike physical characteristics, behavior is dynamic—changing. In his research and subsequent writings in, *The Evolution of the Species*, Darwin showed that all species change over time in response to their environment—the strong survive. In a world of limited resources, Darwin's theory was based on the inevitable struggle against nature and the environment (and no doubt extends to our lives today—physically, emotionally, and mentally). The fittest or most successful will compete more effectively for the available resources. Any small variation that aids in this struggle will not only contribute to the redefinition of a population's overall quality of "fitness" but will also tend to be perpetuated and even enhanced by its offspring. Darwin concluded that, "Favorable variations have a tendency to be preserved, unfavorable to be destroyed."

Just as we have learned the art and science of hand rehabilitation from our teachers and mentors, our overall growth as a species comes from the combined contributions of those who have preceded us. Human creativity is a gift that has changed our lives through countless centuries of experiments and discoveries. History is filled with enough intellectual giants to convince us of the potential power of the human mind. Familiar to all of us are the many innovations that have shaped our lives. How we view the world and our roles is influenced by history. Leonardo da Vinci challenged us to "know how to see," while Sir Isaac Newton advised

that we can see farther if we "stand on the shoulders of giants." In the introduction to his book, *Discover Your Genius*, Michael Gelb eloquently describes this: "You were born with the potential for genius. We all were; just ask any mother."

But human beings sadly also use that remarkable capability to think in ways that are destructive to our world and cultures. No other species on our earth can exhibit such cruelty.

Does it make any sense to distinguish between genetically influenced behavior and socially influenced behavior? Research from biological, developmental, and behavioral science suggests that human behavior is the result of complex dynamic interactions between genes and the physical-experiential environment, operating at many dimensions from the molecular to the cultural, social, and historical.

Years ago, I studied Dr. Avery Weisman's book, *The Existential Core of Psychoanalysis*. This work, published in 1965, is a primer for Psychology 101. During the same time period, I was reading Albert Camus' book, *The Plague*—his existential view of human behavior in response to the total devastation of the European bubonic plague. Because of both theorists of existentialism—one from a scientific and the other from a social view—I was convinced that we do have a choice in how we become who we are. One of my favorite quotes comes in Dr. Weisman's introduction:

That Copernicus, Darwin, and Freud sired three great revolutions in man's attitude toward himself is a familiar truism. Man was first displaced from his central position in the zodiac, then he was no longer a unique biological entity, finally he was deprived even of the distinction of directing his own thoughts or controlling his own actions.

His point was this: While we continue to learn and grow, no simple theory can explain our existence or define our outcome. We do have a choice as to how we exist.

The personality development theory that I can relate to best comes from Erikson, who identified stages of life and the potential dichotomies that must be resolved to fully reach one's potential. Unlike Freud, he identified stages of development based on psychosocial rather than

psychosexual themes. Erikson felt that social rather than sexual issues are of key importance in shaping personality.

Erikson's developmental stages are:

1. Trust vs. Mistrust
2. Autonomy vs. Shame and Doubt
3. Initiative vs. Guilt
4. Industry vs. Inferiority
5. Identity vs. Role Diffusion
6. Intimacy vs. Isolation
7. Generativity vs. Self-absorption
8. Integrity vs. Despair

The development of basic trust begins in infancy, when the infant becomes attached to the parenting figure. If the infant frequently experiences frustration and abandonment, he or she fails to develop basic trust and develops an inability to tolerate anxiety or frustration, and form intimate relationships. At ages 1 to 3 years, children internalize parental attitudes about good and bad, right and wrong, clean and dirty. If the child fails to progress through this stage, they may grow up to feel inadequate and fail to venture out in an independent manner. By the age of 4 or 5 years, children identify readily with the concrete behavior they observe on a daily basis. Their identification is with parental behaviors they hear about but do not observe. It is important for normal resolution of this stage that the child identifies with the significant adults in the family and be supported in the fantasy of someday achieving adult privileges. The child will identify with the parents, particularly the characteristics of the same-sex parent and will be optimistic about the future.

During the time from the ages of 6 to 12 years, the school-aged child ideally turns to the tasks of childhood—school and play. To the extent that a child's efforts to succeed are rewarded, he will be reinforced in his or her sense of being a valuable and competent person. His sphere of influence extends beyond his family and includes teachers and peers. Social injustices such as racism, sexism, or economic inequalities may affect a child's ability to succeed in school or the neighborhood during these years, in spite of the child's best efforts. As a result, the child is dis-

couraged and may lose confidence in his ability to succeed.

During puberty, the individual will develop a sense of who she or he is and of which adult roles might be meaningful and gratifying. A risk of this period is that the individual will organize an identity around antisocial rather than prosocial behavior. Peer influence is of great importance at this stage. Adolescence is characterized by intense friendships and attractions and these pave the way for an intimate relationship. To the extent that the individual was not able to establish an identity of his own with regard to his parents, he will find himself reliving many of the conflicts with his partner that he had with his parents.

As an adult, parenting and social contributions are based in the requirement that an individual be able to put aside his or her own needs sufficiently to nurture a child or devote the time, energy, and effort to be successful in their career or a hobby or philanthropic cause. Without achievement of this task, the individual is narcissistic and self-centered. Finally, as an aging adult, the question that must be resolved is whether the whole process of life and death, and whether the universe itself is trustworthy and safe. This may entail a life review and becoming reconciled with whatever path it has taken. An individual who successfully achieves this task has a positive outlook on life and remains hopeful in the face of aging and the prospect of death. An individual who cannot resolve the issues of this stage may suffer from depression, bitterness about the past, or anxiety about the future.

HOW OUR ENVIRONMENT INFLUENCES US

We now turn our attention to a discussion of how the environment in which we live influences us. Just as a developing child who is deprived of nutrition will not reach their physical or mental potential, failure to receive emotional and spiritual nurturing will stunt psychological growth. I would like to discuss two aspects of the environmental influence on how we become who we are:

early influences and day-to-day influences.

Cognitive development occurs in utero and continues through out our life. While there is no doubt the genetic makeup of an individual will determine his or her aptitude for cognitive, language, and perceptual skill, exposure to well-timed learning opportunities is the basis for reaching that potential.

Theories of personality development have been proposed by many—Aristotle, Jung, Freud, and Havighurst, to name a few. In all cases, stages of development are identified and (like Erikson) the stages must be lived, learned, internalized or resolved to successfully grow. Social status, familial expectations, mentors, our heroes, and the media all influence how we learn and think. When confronted with life and all its opportunities, stresses, and strains, people react differently in comparable situations—but we also have the benefit of memory that is transmitted by biochemical means from one generation to the next. Jung observed that the “unconscious” contains not only forgotten memories and suppressed and repressed material of all kinds, but also material that we subliminally perceive, and feel, and a host of other entities. An earthworm can be taught to move around the rim of a glass. When cut in half, one half grows a head, the other a tail—but both “new” worms retain the learned behavior.

Thank goodness for heredity when it comes to parenting because we don't come with an owner's manual and that especially goes for being parents. For most of us, we can only hope to teach by example: ethics, right from wrong, how to interact with others, kindness and grace. Havighurst identified many traits and the settings in which they are learned:

- Learning an appropriate masculine or feminine role from our family, peer groups, media, and school
- Developing attitudes towards social groups and institutions from our family, peer groups, television and other media, school, and religious groups

- Choosing and preparing for an occupation from our family, and school
- Developing a conscience and moral judgment from family, peer groups, school, and religion

The common denominator of each of these incredibly important tasks of development is the influence of the family and school—not reality television.

Specific child-rearing techniques have been described in the literature, and their influence is far-reaching. For instance, the overprotective parent will fully and quickly satisfy the physiological needs of their child but will be less prompt to gratify the needs of the child for love and esteem. This leads to a personality that requires full and quick gratification of the lower-need levels, but higher-order needs such as love and self-esteem, and a sense of belonging, are connected to dependency on others and to conformity. Losing a positive influencer early in life can leave one open and searching.

Many abnormal coping patterns emit from how we are raised. Why do some people join cults or gangs? When an individual fails to take charge of his or her own life, it leads to vulnerability. When this occurs, they are susceptible to outside influences. While outside influences are normal and required for full development, abnormal dependence on them for fulfillment of self-esteem or self-worth can lead to seeking the life of the gang or cult membership. Drug and alcohol abuse, abnormal patterns of social and sexual behavior, and dysfunction can be traced in many cases to the environment in which one is raised. So many media stars and sports figures, who have so much potential to be heroes, turn instead inward which is manifested as deviant behavior, mental illness, eating disorders, drug, and alcohol abuse. There is so much pain involved in dealing with these problems.

In some cases, pain avoidance can lead to a stronger personality. While studies show that the children of physical or mental abusers are more likely to be abusive themselves, there are also cases where these children have become advocates for safety in the family. Surly, when a person ex-

claims, “I will never be like (or do) that...,” they are making a strong statement as to how they *will* be.

Being in the wrong place at the wrong time, or making a grandiose error in judgment can lead to a life-changing event. Bad things do happen to good people. Death, dismemberment, or mental health issues may result. My point is that we choose how we respond based on (I’m sure you are surprised to hear) our genetic makeup and how we have *learned* to do so. Many changes occur during our lives. I have observed how people get “stuck” in stages related to the ability to cope with change. Change is an event—transition is the process of dealing with the change and resolving the conflicts it presents. Such an event as the loss of a significant other, or failure to achieve a goal, requires an individual to respond, grow, and adapt.

In her famous book, *On Death and Dying*, published in 1969, Elizabeth Kubler-Ross identified five stages: denial, anger, bargaining, depression, and acceptance. These stages can be applied to the coping mechanism related to any of life’s events—the most dramatic only of which is terminal illness or the death of a loved one. Unexpected career changes such as a lay-off, divorce, failure to achieve financial goals, dealing with a disability or illness, being the victim of crime, and many of life’s failings are often met with the same feelings.

In denial, the individual is not ready to deal with the emotional impact of the change. Denial is a necessary buffer—it allows time to mobilize coping abilities. Anger is the sense of outrage and resentment, as denial can no longer be perpetuated. The anger is often irrational and misdirected. Anger is an expression of the need to regain some control over the situation. Bargaining is a stage that attempts to postpone the inevitable. It is characterized by the individual negotiating a trade or trying to “make a deal - maybe if I do this or that...” As the full impact of the situation sets in, and the inevitable becomes apparent, depression sets in. There is the realization that the change is inescapable and there are no magic formulas. Acceptance occurs when the individual finally comes to terms with the situation and

moves on with their life. Failure to resolve (or frankly, to go through) each stage of this process may result in very specific personality changes. We see this all the time in ourselves and those around us.

The Media

How does the media impact who we are? Positive or negative, I think we would all agree that books, magazines, radio, television, and newspapers influence us. The speed at which this information comes to us and literally the amount of information with which we must deal can be overwhelming. E-mail and the Internet, cell phones, and instant messaging have changed our lives—some would say negatively. The source of the majority of our entertainment—the media—plays a very significant role in our lives. From how we should look and dress to how we communicate, the preservation and evolution of music, our language, and our outlook on life, the media (in some cases sadly) teaches us how to “keep up with the Joneses,” that we *should* be thin, how we *should* think and act. It’s enough to make one feel more than a bit overwhelmed.

By the time a child graduates from school, it is estimated that they will have witnessed 180,000 individual acts of violence—what is the source of this exposure? It is television. Violence is a factor that constantly shapes us.

In his 1994 book, *Psychotrends*, Dr. Shervert Frazier described the increasing violence of our culture as a factor in our lives. Consider these observations of life in the United States—made even before the threat of terrorism was even a part of our lives:

- The murder rate in the United States, per capita, is ten times higher than that in Japan and Great Britain, and at least seven times greater than that in Western Europe
- The teen suicide rate doubled from the years 1968 to 1994
- A violent act is committed against a woman in the home every 15 seconds, against a child more frequently

On September 11, 2001, our lives were changed dramatically. Many were affected more than others, but all of us share the collective uneasiness and feeling of insecurity. We now live our lives from yellow, to orange, to red. The trade-off of giving up personal liberties and individual rights for security has been negotiated without our input—thus furthering our feelings of helplessness.

So here I offer the age-old question: Does the media reflect life or does life reflect the media?

There are some positives. The media allows us to learn about those who have preceded us. As I mentioned in my introduction, I love biographies and the history lessons we learn from them. We as human beings tend to believe we are isolated and that our experiences are unique—which they are to a degree—but we can also learn not to reinvent the wheel, and be inspired by history's lessons. We are not only entertained but often find useful information in the media: 24-hour news, health, and weather channels provide us with up-to-the-date information that is useful for planning our days and weeks and preventing illness. The Internet is an incredible source of information and a source of communication and learning. It doesn't come without a price; unfortunately, we seem to spend an exorbitant amount of time dealing with spam, junk email, and pop-ups.

HOW WE CHOOSE OUR CAREER

In each of us, our genetic background underlies our interests and aptitude—which in turn relates to our vocational choice. Maslow identified the hierarchy of needs that drives human behavior.

Physiological needs are the very basic needs such as air, water, food, sleep, and sex. When these are not satisfied we may feel sickness, irritation, pain, and discomfort. These feelings motivate us to alleviate them as soon as possible to establish homeostasis. Once they are alleviated, we may think about other things. Safety needs have to do with establishing stability and consistency in a chaotic world. These needs are mostly psychological in nature. We

need the security of a home and family. However, if the family is dysfunctional we cannot move to the next level because we are constantly concerned for safety. Love and belongingness have to wait until we no longer cringe in fear.

Love and belongingness are next on the ladder. Humans have a desire to belong to groups: clubs, associations, unions, religious groups. We need to feel loved by others, to be accepted. We need to be needed. Hail the beer commercials! When was the last time you saw a beer commercial with someone drinking beer alone? There are two types of esteem needs. The first is self-esteem, which results from competence or mastery of a task. Second, there's the attention and recognition that comes from others.

The need for self-actualization is that desire to become more and more what one is, to become everything that one is capable of becoming. People who have everything can maximize their potential. They can seek knowledge, peace, esthetic experiences, and self-fulfillment. Middle-class to upper-class people take up environmental causes, join the Peace Corps, or go off to a monastery—not those who are struggling to survive.

As we understand motivation, thus we can explore how we choose our careers.

A variety of questionnaires have been developed over the years by many researchers. Each has sought to identify and correlate an individual's needs with job satisfaction. Occupational choice is hereditary in some cases: offspring follow parents, or at least the parents' career and lifestyle impose rigid limits on the variety of careers children consider. Family-owned businesses such as retail stores and farms are good examples. The inheritance of occupation is also more likely to occur where the parent works in a state of relative isolation from other people.

One of the best-known theorists in determining the answer to the question, "How do we make our career choice?" has been Dr. Anne Roe. Dr. Roe's study, "Early Determinants of Vocational Choice" was published in the *Journal of Counseling Psychology* (1957;4:212–217). Personal values also play into career choice. Rosenberg

(*Occupations and Values*. Chicago: Free Press, 1957) found that four basic values were expressed by entering college freshman: working with people in a helping manner, earning a better living financially, acquiring social status and prestige, and having the opportunity to be creative and use special talents. Not surprisingly, he found that architectural, journalism, drama, and art students valued self-expression, while students who were seeking to study finance, sales, and real estate scored highest on extrinsic reward values. He followed up two years later and found that as students' values had changed, so had their majors. Personality and interest inventories continue to play a role in career counseling.

Career choice is influenced by inherited attributes such as race, gender, and physical appearance and with special, apparently inherited abilities involving motor, intellectual, and perceptual abilities. Cognitive and affective predispositions an individual displays in dealing with, interpreting, and predicting the environment are important components. As important are environmental events and settings in which these events occur. These include the social climate, individual experiences, the job market, training opportunities, labor laws, long-term potential, family resources, role models, social and climatic events such as war or natural disasters, technological developments, and educational opportunities. Associative learning in which the individual observes relationships, activity and consequence and relationships between events and predictable contingencies also plays a role.

Through our experiences, we develop and learn to apply a wide range of skills and attitudes involving work standards, work values, work habits, attending and selecting, and affective responses to each new task. Another theory—what I like to call very simply "being in the right place at the right time"—may have more to do with the vocational decisions people make than systematic planning and vocational counseling. Sometimes, we find ourselves with an opportunity to do something very special with our lives.

In summary, the degree of motivation toward the attainment of a voca-

tional goal is a product of an individual's need structure. The degree to which we are motivated to achieve vocational goals is related to our accomplishments. Given equal genetic endowments, differences in occupational achievement between individuals may be related to the sum of our motivational experiences—which may have come during childhood, through the direction of a mentor, or the overarching need to achieve more than one's ancestors.

In their study, "Career Choice and Professional Preferences in a Group of Canadian Physiotherapy Students," Ohman et al. provided some insight. Six factors influenced the students' choice of career: Job accessibility and the potential to earn a good salary, a positive exposure to the profession, the interesting aspects of the profession, a desire to help other people, an interest in sports and athletic injuries, and influence from peers. I think we can all relate to these influences in how we got started in our pursuit of the rehabilitation profession. Their conclusion was, "An on-going challenge for academic programs is to find the balance between preparing students for current practice as well as advancing the profession by preparing the students for future roles."

As the many testimonies you have seen today relate, at some point there was an "ahaa"—a haiku, an understanding of the direction we should go.

CONCLUSION

We grew up somewhere along the way. After the learning of childhood, the rebellion of adolescence, the excitement of early adulthood, the acceptance of responsibility, social awareness, and accountability, we are now who we are. The work of adult life is not easy. Each step not only presents new tasks of development, but also requires letting go of the techniques that worked before.

We arrive with a package—our genetic predisposition, which determines so many of our physical characteristics and potential. Our early experiences shape our outlook on life, and we learn what we live. Role models, the media, chance happenings and events, opportunities, and circumstances lead us to the cross-

roads of choice. Hopefully, there is someone there to guide us.

The biggest lesson Georgiann has taught me (and she has influenced so many of you) is this:

Don't take yourself so seriously. Not one of us got to where we are in life or in this professional life without a lot of influences along the way. Don't ever keep score or expect favors in return—what one gives will always come back to you, or someone who needs it.

In his recent commencement speech to the Texas A&M University graduating class, Neal Boortz, who is a Texan, a lawyer, and now a nationally syndicated talk show host from Atlanta, made this observation:

The key to accepting responsibility for your life is to accept the fact that your choices, every one of them, are leading you inexorably to either success or failure, however you define those terms. Some of the choices are seemingly insignificant: Whom to go to the movies with; whose car to ride home in; whether to watch the tube tonight or read a book on investing. But, and you can be sure of this, each choice counts. Each choice is a building block—some large, some small. But each one is a part of the structure of your life.

However, I do believe that the choices we make do ultimately allow us to reach our potential and contribute to the success of our collective species. We all have the power to influence others and make the world a better place to live. Some may even take the next step: leadership.

In his managerial cult classic, *Leadership Secrets of Attila the Hun*, Wes Roberts assumes the role of the great leader of the nomadic tribes of Eastern Europe, and has this response to the question, "How, Attila, might I know if I possess sufficient desire to be a chieftain? Above all other traits, one who desires to lead must possess an intrinsic desire to achieve substantial personal recognition, and be willing to earn it in all fairness." He continues, "You must be willing to learn, listen, and to grow in your awareness and abilities to perform the duties of your office. This is not often accomplished without tremendous effort and sacrifice of other interests."

All of you have traits of leadership—you have made the decision to

specialize your therapeutic skills. Perhaps you will go one step further, and assume a leadership role in your department, or hospital, or this fine society.

One of my favorite historical figures is Queen Elizabeth. Elizabeth's life characterizes how we become who we are—she overcame adversity. Her strong will, intelligence, and motivation ultimately provided for her success. A master of her educational opportunities, a survivor of imprisonment, and deeply religious individual, she overcame the prejudices of a 16th-century world to become one of the most beloved and respected individuals of her time and is remembered today for her successes.

Gelb described all of her accomplishments and the platform she built that influenced so many people:

- She began colonization of the New World
- She united England after 11 years of instability and bloodshed
- She established the Anglican Church
- She repeatedly fought off threats from the superpowers of her time: France and Spain
- The naval defeat of the Spanish in 1588 was the greatest military victory of the time and symbolized the power of her reign
- The energies unleashed by her reign allowed the arts to flourish and led to the foundation of the British Empire
- As one of the longest ruling and most successful monarchs in history (45 years) she inspired loyalty, love, and devotion of her people
- Her reign planted the idea that ultimately led to a paradigm shift in the beliefs about the abilities of women

It is with sincere gratitude for this honor, that I close the 2004 Nathalie Barr Lecture and, in doing so, I wish to leave you with the lessons I have learned about business from being a hand therapist.

- The therapeutic relationship is based upon communication, cooperation, mutual respect, and trust. This is also a great acumen for managing people.

- Assess the situation, establish and implement a plan, reassess, and make changes to the plan.
- The first priority in every situation is to manage the issues that can make things worse.
- A quality product and ethical behavior are easy to spot.
- There is no excuse for having a “bad day.” No matter how bad a day you are having, someone else is in worse shape than you are.
- One must juggle priorities, multitask, handle unexpected “crises,” and do it all with grace and charm.
- People will only exchange their hard-earned money, expend time, or put energy into something that solves their problem or makes them feel better. If we don’t establish that we provide value, we won’t get paid for what we do.
- Every day, every interaction, and every situation provides an opportunity to exhibit professionalism, passion for what we do, and leadership.
- Laughter is a great therapeutic tool.
- Our success in hand therapy, business, or life depends ultimately on the success of those around us. It is based in our ability to teach and motivate, to establish clear goals, and communicate them effectively. A tremendous amount of satisfaction comes from watching

those with whom we work succeed.

Thank you for this honor—an experience that has changed my life.

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