

Titans of the Forests

The Economic Evolution
of the Human Species
and that of Our Cultures

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*This book is dedicated to all of the men and women,
who will pause during their hectic day of survival
and look up into the clear blue sky
and wonder.*

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Chapter Six

The Middle Paleolithic Nomads “Homo sapiens”

“Today, we stand with the brains of hunter-gatherers in our heads, looking out on a modern world made comfortable for some by the fruits of human inventiveness, and made miserable for others by the scandal of deprivation in the midst of plenty.”

Richard E. Leakey (1944-)

Kenyan Paleoanthropologist and Conservationist

Ecological change is a universal constant, which can uniformly create life, sustain life, or terminate life. The evolutionary genesis of the hominid species as well as our own civilizations has been environmental change. For if our environment hadn't periodically turned colder and drier, the early australopithecines would never have eventually evolved into the Homo sapiens. As a species of the primate family, we haven't conquered our surroundings. Instead, we have learned to adapt to the crushing tides of change and overcome the competition around us.

At the onset of the Great Pleistocene Ice Age, our species began to experience several evolutionary leaps as a result of a large number of climatic changes brought about by the present Ice Age. For the next 2.5 million years, we progressively evolved from the H. habilis into the H. ergaster/erectus and then into the H. heidelbergensis. Subsequently, they would evolve into the H. sapiens and then finally into the present day Homo sapiens sapiens. However during this same period, our economy had also evolved from one of scavenging into nomadic

hunting and then finally into farming and herding. These fantastic physical and economic leaps were the result of the numerous ebbs and flows of the glaciation periods, which induced our almost constant adaptation to the changing environment.¹

Once the massive glaciers began to creep across the earth's surface, the nomads and animals of Eurasia were forced to migrate towards the equator. Even though the climate was milder and there was initially an abundance of vegetation, it wouldn't have taken a very long time before the northern nomads clashed with the southern hunter-gatherers (see chapter 4, page 57-58) in the central and southern regions. And since the competition for food was greatly intensified during these periods of extreme cold and over-crowding, the struggle for survival would have been extremely harsh, especially for the northern nomads.²

Needless to say, the southern hunter-gatherers had a tremendous advantage over the northern nomads in terms of surviving and finding new sources of food within their own environment. And although these unwelcomed northern nomads were highly mobile, organized, and armed to the teeth, their numbers were without question greatly reduced by the time the glaciers began to recede back to their poles. Therefore, it is of little wonder that our southern hunter-gathering ancestors would eventually evolve into an even more adaptable, imaginative, and healthier population, than their more northern nomadic cousins.

It has been estimated that approximately 200,000 years ago, the *Homo sapiens* (wise human) first appeared. While inhabiting the continents of Africa, Europe and Asia, they replaced the earlier hominid species that had dwelled in their particular regions. This occurred almost immediately after the Mindel-Riss interglacial period had ended and the Riss glaciation period was about to begin. It is believed that they either radiated out of Africa or that they were simultaneously springing up all around the globe.³

Today, the scientific community isn't unanimous on either theory. It is believed by many scientists that due to the *H. ergaster/erectus* continuous interbreeding, which created a balance between their genetic drift, gene flow, and the natural selection process, their

development moved along in the same general direction. While maintaining their regional characteristics, it was these surviving varieties of *H. ergaster/erectus* that would directly evolve into our own *H. sapiens*. All across Eurasia and in Africa, they would suddenly appear, eventually forming our different ethnic groups and our diverse languages. The proponents of the “Multiregional” theory point to the fossil and genomic data, along with the continuity of the archaeological evidence as support for their hypothesis.⁴

However, the DNA evidence indicates that the *H. sapiens* evolved solely in Africa around 200,000 year ago. After migrating from Africa approximately 130,000 years ago, they replaced the earlier hominid populations, such as our own *H. heidelbergensis* and finally the Neanderthals. Despite several problems with this hypothesis, such as projecting a species actual population and their mutation rate, along with the DNA’s unreliability as a molecular clock, the majority of the scientific community appears to support the “Out of Africa” theory, even though the archeological and linguistic evidence does not support it. But whatever the scenario, it really doesn’t apply to our economic evolution. The nomadic *H. sapiens* were eventually able to claim the world as the lone survivors of the hominid family.⁵

Physically imposing and exceptionally shrewd, the *H. sapiens* displayed most of the physical characteristics of the modern day human. Standing between 5 feet 6 inches to 6 feet tall and weighing up to 190 pounds, their hands and feet were highly developed. Even though the *H. sapiens*’ skeletons were lighter than their robust predecessors, they did have a curved spine and a narrow pelvis that effectively distributed their body weight for walking long distances. While possessing the largest brain (e.g.1350cc) of the hominid family, their high arched skulls were thin-walled with a vertical looking forehead. Also, their faces showed a much smaller brow ridge, a prominent chin and nose, and a small set of teeth that was surrounded by a less protruding jaw.⁶

At the beginning of the last glaciation period (Wurm-Weichselian) approximately 110,000 years ago, *H. sapiens* had already improved their ability to kill at a considerable distance by using an improved throwing

spear, the dart-throwing atlatl, and quite possibly the first bows and arrows. As a group, the hunters could bring down any large animal by ambushing it and then shooting their darts or arrows into either its intestines or its hind legs. Then once the animal was wounded and crippled, they would surround it and then thrust their spears into its heart. Afterwards, it was just a matter of dividing the meat among themselves and then carrying it back to their camp.⁷

The *H. sapiens*' Aterian tool industry was comprised of an assortment of improved clipping tools that were fashioned in three different stages. Initially, the hunter clipped a stone into a long blade or into a rectangular shaped figure. Next, he would clip out a groove at one end, so as it could be tied to a wooden handle or pole. Then finally, he shaved the edges of the stone into a very sharp Levalloisian point. Compared to the previous tool industries (Oldowan, Acheulean, and Clactonian), their weaponry and tools were better constructed, sturdier, and more diversified. As a result, the average hunter could employ a wide variety of knives, scrapers, axes, arrows, spears, and cutting blades for many different purposes.⁸

The impact of making weapons and tools upon human civilizations runs much deeper than merely how societies have advanced through technological innovations. In fact, it had such a tremendous influence upon our perception of the world around us, and how we even perceive ourselves, that the repercussions of it can be felt even today. For when our ancestors began to produce weapons, clothing, tools, baskets, jewelry, and other items, they would inevitably look upon those items as their personal possessions, instead of as the communal property of the clan.

Envisioned and then produced by a person's own hands and imagination, these items could be kept, traded, or just given away as they became surpluses. But whatever their inclination, it was this introduction of handmade weapons, tools, and goods and their eventual surpluses that unknowingly created the concept of private property, which in turn would ultimately establish and maintain the individuals' social prominence within the clan. Later as we became

farmers and herders, the concept of private property would be expanded to include animals, people (slaves), and land.

As Stone Age hunters, they were driven by their traditions, migration patterns, and hunger. They never farmed the land, raised an animal, or built a fence. They used tools made of stone, wood, and bone, while they huddled around their grass shelters. They made their clothes out of furs and watched their children play in the dirt among swarming insects. They lived under the sun, stars and the moon as they roamed the landscape in search of food. Always on the move and forever struggling against the elements, they stoically faced the dangers around them. While living day to day, their shortened lives were a mixture of temporary pleasures, frequent tragedies, and prolonged suffering. They were a determined people whose way of life would never ensure a large number of them. Even during the times of plenty, they cried over their dead, feared the unknown, and comforted the sick. They were a restless primitive people, who lived for the moment and never knew the joy of a promising future.

While wandering the earth's surface for almost 2 million years, our nomadic ancestors lived a lifestyle that demanded a high birth rate in order for them to have had any chance of survival. Undoubtedly, the females experienced an exceptionally high number of miscarriages, due to the rugged nature of constantly living in the outdoors and the physical demands placed upon them. And even when a child was born, the majority of them wouldn't have survived for very long. The lack of proper hygiene and prenatal care would have created a soaring mortality rate. Thus in response to the economic need to produce as many offspring as possible, our nomadic ancestors would slowly undergo several physical, biological, and cultural changes. In due course, these changes would include the enhancement of the males' already intensified biological sexual drive (libido) and a change in the females' physiological ability to bear more children.⁹

Within the broad spectrum of human evolution, the males with the strongest libidos had a distinct advantage over their less testosterone-driven males in reproducing more offspring. In the long run, this had a tremendous impact upon their roaming culture and our biological

evolution as a whole. For generation after generation, the more dominant sexually inclined males were selectively breeding as a way to maintain their nomadic way of life. As a result, they were unknowingly creating a genetic pool of sexually hyper-active males, who could only satisfy their sexual needs by constantly relying upon their aggressive behavior. Hence, the male's intense sexual instinct (libido) was not only intensified even further, but it would also increase his aggressive drive towards his female counterpart as well. This intensification of the male's libido and his aggressive drive would metabolically make him an emotionally inclined introvert as compared to the average female. Since his most inner emotional and instinctual sexual needs were constantly being expressed and then fulfilled whenever he masturbated or copulated, there wasn't any motivation on his part to dwell on his feelings. His world was one of directing his personal and physical power towards a specific goal without pausing to evaluate how he felt about it.¹⁰

As the givers of human life, the males' primordial desire to copulate or to achieve ejaculations could be described as a form of biological addiction. Similar to a modern day drug addicts experiencing the sensation of having a monkey on their back, the young males would come to exhibit the same symptoms of physical irritation, frustration, obsessive behavior, and the loss of rational thought, whenever his reproductive drive wasn't being biologically satisfied. Subsequently, the males of our species have evolved into undeniably the most sexually obsessed and prolific creatures within the animal kingdom. They would find themselves an ardent prisoner to their own exhilarating and ever-present passion to spread their seed. It is a passion so overpowering that it can make an old man act like a childish fool and a young naïve one act like a reckless hero. Even today, if the average male isn't actively seeking out a sexual partner, he is usually fantasizing about it; unless of course, he has directed his sexual energy towards another goal. This form of habitual behavior doesn't make him morally weak, depraved, or even socially irresponsible and immature. Instead, it makes him quite human and deeply vulnerable.¹¹

Contrary to modern scientific myth, which has not been substantiated in over 5,000 years of written history, the female of our species has

evolved into a less sexually driven individual as compared to her male counterpart, thus exhibiting less physical aggression. However, the female of our species has always possessed the innate ability to sexually influence and guide the males towards their own particular goals, which could be called the understatement of the millennium.

As the producers of human life, the nomadic female of our species was primarily bred and raised to bear a large number of children, thus her physical adaptation came in the form of developing tremendously strong leg, buttocks, and back muscles in order to support her child bearing. Furthermore, the female's estrus would eventually disappear and be replaced by the much more fertile uterus as her pelvic bone became wider to ease the strain of child birth. Even though she possessed under-developed arm strength, she could still carry a heavy load on her back for long distances, while bearing a child in her womb. Unlike her primate predecessors, who gave birth to a single child every three or four years, she was soon able to produce children on a yearly basis. Literally pregnant throughout her brief existence, when she wasn't giving birth herself, she was usually assisting the other females in giving birth.¹²

For the average female, childbirth is an enormously terrifying, painful, wondrous, and unforgettable experience. It usually occurs about 38 weeks after conception. During that period, most pregnant women experience symptoms of nausea and vomiting, excessive fatigue, cravings for certain foods that are not normally sought out, and frequent urination particularly during the night. It is an extremely emotional and stressful time for the female. As her abdomen expands, her breasts will enlarge and become very tender. Then, she may experience back aches and even more discomfort as the movement of the fetus becomes stronger. Fortified by her desire to produce offspring, she will experience active labor pains that can last 8 hours or much longer, depending upon the frequency of her uterine contractions. Once her cervix has completely dilated, the baby's head will descend into the pelvic area (crowning) of the vaginal opening. As the female pushes or bears down, she will feel an intense burning or stinging sensation. Especially for first time mothers, the pain can be almost

unbearable as the doctor or midwives assist the child out of the womb.¹³

Once the baby has been born and handed to its mother, her placenta (afterbirth) will separate from the wall of her uterus and then exit her womb. Then in a moment of supreme exhaustion and satisfaction, she will gaze into the eyes of her new born child and instantly realize that all the pain, discomfort, and anguish she had endured was in the end all worthwhile. Unfortunately, several complications could arise that will threaten both the child and its mother life, such as infections, perineum lacerations, and obstetric hemorrhaging. But as modern medicine and techniques have improved, these dangers aren't as prevalent as in the past. Overall, the females' ability to produce human life is a very fascinating, traumatic, and necessary event. It is an event that has ensured our species survival along with our genetic continuation. Moreover, it is a self-defining experience that she will always remember with ambivalence.¹⁴

This physical and biological adaptation to produce more children had a tremendous impact upon the females' maternal impulses. Comparable to the males' libido, they eventually developed an extremely forceful "mother instinct," rarely matched within the animal kingdom. Exceedingly possessive of their children and intensely protective of their dens, this inflamed instinct would make them extremely determined, adaptable, emotionally extroverted, resilient, and profoundly patient. Unlike the males' primary instinct to aggressively spread their seed and then impatiently move on to find another den, the females' maternal instinct is to organize and preserve the den, while nurturing her offspring into adulthood. Although, the two genders of our species evolved into completely different creatures in their sexual compulsions, self-perceptions, and priorities, their relationship would evolve into an indomitable partnership of one.¹⁵

Due to the extraordinary development of the males' inflamed libido and the females' profound sense of motherhood, our species has been able to historically overcome a succession of wars, famines, epidemics, natural disasters, and environmental changes. This ability to produce a large number of offspring, while surviving under the most extreme

conditions, has been the foundation of our species success. Had we not possessed either one of our distinctive genders' characteristics, we would have remained a mere footnote in the passage of time.

In all likelihood, our species' homosexual inclination was handed down to us by our primate ancestors from the eastern forests of Africa. Within their small bands, the young males and females regularly engaged in such behavior, either as an alternative to mating or perhaps as a sexual preference. Primarily motivated by their sexual or reproductive drive, along with their emotional and biological inclination, it wasn't considered a social taboo among the food gatherers or among the scavengers as such. However as nomads, it was probably frowned upon, because of their need to sustain their clans' populations. Nonetheless, this sexual inclination towards homosexuality was eventually inherited by their agrarian descendants. By that time, homosexual behavior had become an intricate part of human societies. As a consequence, many of our ancient cultures embraced their presence, while many others wouldn't be so tolerant.¹⁶

Whether or not homosexuality has been genetically, biologically, or even psychologically inherited by an individual is still being hotly debated even today. Strictly speaking, if an individual is raised by homosexual parents to be attracted to his or she own gender, unless they have an inner attraction towards their own gender, they will remain attracted to the opposite sex. Apparently, there are many different reasons behind an individual's sexual inclination towards their own sex, a fact that will frustrate anyone attempting to study the subject. Yet one cannot deny that no matter what the culture or the period, it is quite common for the males and females of our species to experiment and to explore their own sexuality during their adolescent years. And in most incidences, this will include a degree of sexual experimentation with their own gender. As a result, it is during this period of adolescent experimentation that the individual will usually discover his or her sexual orientation.¹⁷

Unlike the nomadic female's compulsion for homosexuality, which was possibly derived from her "mother instinct," along with her biological and emotional attraction to her own gender, the male's

homosexual impulse was most likely initially driven by his instinctual “libido.” It is through this act of sexual gratification that a nomadic male was able to express and to fulfill his biological need to spread his seed, while emotionally satisfying his need to bond with those of his own sex. Within the realm of both hetero/homosexuality, those individuals that desire to dominate a relationship will intentionally seek out those individuals that want to be dominated and vice versa. This need to dominate or to be dominated by another individual was handed down to us from our primate ancestors. For better or worse, it was a very prominent aspect of being a highly socialized species, whose individual identity and status was derived from his or her hierarchical group.¹⁸

The human homosexual has always sought out an emotional and physical relationship with a partner who can best fulfill his or her biological and emotional needs. This type of human behavior has always been a part of our societies and it will continue to be so. As many scholars have come to recognize, there is no such thing as a homosexual, only homosexual behavior; thus asserting that they aren’t any less human or any less normal than that of the average heterosexual.

Instinctively leery of outsiders, our nomadic ancestors were an extremely loyal group of people. Their survival depended upon working together within their close knit clans. Since their contact with the other clans was extremely limited, their cultures remained stagnant without ever having the opportunity to exchange ideas or observe the many different ways of doing things. Individuality as we know it today didn’t exist for them. They ate the same food, spoke the same crude language, wore the same type of clothing, prayed to the same spirits, and reacted to most situations in much the same manner. Due to their success as nomads, they began to imagine that they had been favored by the unknown powers around them. Thus within their mental framework, they had become the center of the universe and represented the heart and soul of what it meant to be a human.¹⁹

As a group, they undyingly believed in their own distinct relationship with the powers around them and the uniqueness of their way of life.

They worshipped the animals they hunted by performing rituals in their honor. They roamed the surrounding expanse as free as any creature on earth and were intelligent enough to recognize the wonder of it all. Standing at the apex of their food chain, they believed the sun and the stars evolved around them, because their way of life was the only path that appeased the spirit world. Immensely proud of their traditions and their way of life, they became very chauvinistic about their cultures. Viewing themselves as “The Chosen People,” they would look upon any outsiders as being inferior, untrustworthy, and spiritually out of touch. Thus, the nomads would take their initial instinct of fearing any outsider and turn it into a full-blown cultural and spiritual prejudice.²⁰

The Middle Paleolithic nomads sought immediate sensual gratification in the simple everyday pleasures of warmth, security, food, companionship, and sex. The sensation of the moment was more important to them than the memories of the past or the possibilities of the future. Living in the moment gave their lives a sense of meaning, while they struggled to scratch out a meager living. Personally dreaming of a better tomorrow or occasionally regretting a past deed didn’t exist within their intellectual framework. To them, life was immediate, unforgiving, hostile, and completely centered around the moment. Thus, their hedonistic approach to living for today was not only a reaction to the dismal circumstances they faced, but it was also a reflection of their nomadic lifestyle and spiritual beliefs.

Spiritually, the nomads’ beliefs were based upon a mixture of mysticism and animism. Within their day to day experiences, the world around them was deemed as contradictory, chaotic, whimsical, mysterious, and even magical. Everything around them seemed to possess its own unique life force, or rather a spirit all of its own. In order for them to gain an understanding or an explanation of a certain phenomenon, it was essential for them to study the spirit of the thing. Whether the phenomenon was an animal, a thunder storm, a rushing river, a tree, or the force of the wind, they believed it possessed a spirit, struggling within the same universe. As a result, the spirits weren’t perceived as being centralized nor could they be rationalized. Instead, the nomad’s world was perceived as an agglomeration of spirits that

expressed themselves as the basic forces of nature; forces which were continuously colliding with each other.²¹

The concept of an omnipotent god or a group of gods wasn't a part of their belief system. They believed in their own individual power and the destiny of their group, which could only be obtained through the whims of the spirits. Unlike the deities of today, the nomads' spirits could only influence circumstances; they weren't expected to change them. Thus, their religious interpretation of the environmental phenomenon around them, or rather that of the spirits was directly tied to the economic concept of "plenty." Only after the spirits had provided them with plenty of animals to hunt, plenty of water to drink, and plenty of plants to eat could they proclaim themselves favored by the spirits. Within their mind-set, this favor could only be maintained by not violating their sacred taboos and thus alienating the spirits. Throughout their childhood, they were taught to behave in a certain matter as a way of ensuring their future good fortune.²²

While living in a rootless economy that wasn't very conducive towards scientific thought, the early nomads could understand the concepts of cause and effect only on an elementary level. The killing of a helpless animal to provide food for their families, the clipping of a rock into a tool, and the making of a camp fire were all actions and results they could perceive and understand. But, they were incapable of understanding the phenomenon like the appearance of a comet, the rumbling of an earthquake, or the sudden illness among their own. In their minds, it must have something to do with the unseen mystical powers around them. While being naïve, superstitious, and suspicious of their surroundings, these powers would become a part of their spirit world, filled with mysterious omens, scared events, and random calamities. It was a world where magic prevailed over sweet reason, where fear triumphed over knowledge, and where hysteria succeeded over self-control. Therefore, the unexplainable events of their lives became the will of the spirits, which later would be translated by the agrarians as the will of god or the gods.²³

The underlying basis behind the early nomadic religious beliefs was ignorance and fear. As they roamed the various parts of the earth, they

feared almost everything and everyone. Within their short life spans and their limited experiences, these fears were based upon their profound ignorance of the world around them. They saw danger and mystery everywhere, because they were everywhere. Living from hand to mouth, they wandered the land never knowing what the powers of nature had in store for them. And because they didn't understand the basic physical laws around them, they lived an irrational terrified existence, an existence based upon superstition. While appeasing and worshipping the powers around them, such as the animals, the wind, the sun, and the earth, the state of their ignorance and fear would grow ever larger and deeper. In the end, it was this superstitious inclination that would form the spiritual basis of their cultures. Never really understanding the forces around them and always living in constant fear of them were the cornerstones of their spirituality.²⁴

Paradoxically, this same superstitious reaction to our surroundings still exists today. Humans have always been extremely superstitious and we always will be. It is the very nature of our existence to fear the unknown, the future, and our inevitable mortal demise. It is also a part of our nature to react to that fear in some irrational manner. Within every modern religious institution, there is an element of the nomad's superstitious nature or inclination. It is an inclination that can propel an otherwise logical individual to endorse the occult, witchcraft, or an extreme political or religious position. The coming of science and technology may have reduced our state of ignorance, but the fear of our own fatality and that of the unknown is as old and as powerful as ever.

The *H. sapiens*, even in the best of times, lived an uncertain and brief existence. The harshness of their reality directly affected how they mentally approached the questions of life and death. For an individual wandering the wilderness, nature was a cluster of contradictions and mysteries, interrelated with a maze of unmistakable absolutes. It was a cosmic world filled with immediate pains and pleasures, frequent hopes and despairs, and overpowering joys and passionate fears. When the nomads searched for answers and directions to their future survival, they would intuitively look to their natural surroundings to provide them. Within the scope of their belief systems, every phenomenon such as the wind, the rain, the sun, and even the other animals had a

spiritual significance. These natural wonders represented much more than just random occurrences. They represented the awesome powers of their surroundings. Powers to be worshipped and feared, but above all else, they were powers to be appeased through rituals.²⁵

One of the first known rituals was the burying of their dead. Along with the Neanderthals, several *H. sapiens'* burial sites have been unearthed throughout Europe and the Middle East. The earliest undisputed human burial dates back approximately 100,000 years. Human skeletal remains stained with red ochre were discovered in the Skhul cave at Qafzeh, Israel. The body was also buried with an assortment of stone tools, sea shells, and animal bones, which could indicate they had developed a religious ideology that included the belief in an afterlife. Of course, no one really knows for sure the purpose behind the rituals. Several secular theories have been put forth by today's scientists, such as the clan showing respect for the dearly departed, providing family closure, hiding the odor of the corpse, or attempting to keep their remains away from scavengers have all been considered real possibilities. However, what this burial site did positively indicate was the presence of a shaman.²⁶

In terms of their religious legacy, the nomads not only left behind their superstitious character and spiritual interpretation of events, but they also gave us the very foundation for modern religions. It wasn't a foundation based upon a written moral code or the heritage of erecting churches, temples, synagogues, and mosques. Instead, they gave us the significance of performing rituals, the necessity of implementing codes of behavior, and more importantly, the essential role of the religious leader, the shaman.²⁷

Usually, the role of the shaman was a hereditary position handed down from father to son. However, the position could also be occupied by whoever demonstrated a talent for interpreting the whims of the spirits, which also included females. Depending upon the strength of their mystical powers, anyone could become a shaman, regardless of their age or gender. Of course, it is impossible to really know for sure when the shaman became an important part of the nomads' life. But

when these spiritual leaders did emerge, their contributions to the evolution of human civilizations would be immense.²⁸

In fact, it was these early shamans that would give the human race something far more important than mere rituals. For the first time in our existence, they attempted to explain the purpose of our lives and the meaning behind it all. And even though their metaphysical rationale was extremely primitive by today's standards, this was a very important part of our cultural development. Within the sometimes harsh and always unpredictable course of human events, it was this expression of purpose and meaning that provided us with an unshakable faith to carry on under the most extreme and adverse conditions. Whether a shaman was performing a ritual to control the powers of nature, counseling a disturbed individual, or just reassuring the group of better times ahead; their role as a clan's religious leader would become an indispensable part of the human experience. Rational or not, these holy men and women of the great outdoors would create a tradition of caring for the ill, counseling the anguished, assisting and protecting the helpless, and inspiring faith in others.²⁹

Undoubtedly, our ancestors possessed an extremely high tolerance for physical pain and suffering. The nomadic economy demanded no less of its people. They didn't fear death, because it was all around them and a part of their daily experiences. For many suffering individuals, death was seen as a release from their miseries. On the whole, they were extremely resilient and hardy, but rarely healthy. Toughened by their daily struggles, they were usually hungry, exposed to the elements, and constantly filthy. In the winters months, they regularly suffered from pneumonia and frost bite. The older ones suffered terribly from rheumatism, loss of teeth, and intestinal diseases. Since they had a poor diet and lived in the open air, many of them experienced the anguish of arthritis or even blindness at an early age. A broken bone, scratches from a thorn, or a snake bite could lead to death in a matter of days. And yet, they continued to stoically endure and in many cases overcome the harshest injuries. This was made possible with the help of the clans' healer and the shaman.³⁰

Initially, the parents took care of themselves and their children, whenever someone was injured or suddenly became ill. This arrangement lasted for a very long time and worked very well. However as the clans grew in size and complexity, the demand for a full time healer became paramount. Since the older alpha females had acted as midwives and were always caring for the health and welfare of their children and their mates, they invariably assumed the role of the clan healer. So long as the affliction was minor, the female healer was very successful in dealing with the everyday injuries of her patients. Over time, she would become an intricate asset and a person of immense status within the clans. However, she would have to momentarily step aside from her patient, if the injuries or the illnesses were beyond her skills. At that point, the shaman was expected to work his or her magic.

The nomadic shamans and healers didn't leave behind any huge libraries of medical data, nor did they develop any vaccines, surgical procedures, therapeutic technologies, or any preventive measures. But what they did leave behind was a ground-breaking medical legacy for later-day physicians. Within their many responsibilities, they were called upon to heal the sick, mend the injured, and ease the pain of the suffering. By establishing the role of doctor, they were probably the first individuals to apply the different types of herbal medicines, thermal cures, and simple surgeries to an individual's medical problem. As the pioneers in medicine, they would set the stage for the agrarian physicians to follow.³¹

Throughout their travels, the nomadic shamans and healers were astute enough to understand that broken bones had to be mended, bleeding had to be stopped, and that open wounds had to be closed or at least protected. Since they didn't understand the presence of germs or possessed the advantages of using clean bandages, they would apply either mud or a wad of moss to an open wound. Actually, this type of treatment worked fairly well for them. Once the mud or moss had dried and hardened, it would adsorb the infectious bacteria and the secreting pus. Then as the wound would begin to heal and close, the application of mud or moss would be discontinued so that a scab could form.³²

In all likelihood, the idea of using bandages came about for the purpose of keeping the mud or the moss on the wound until it could dry. While doing their daily chores, the application of a bandage would have helped ensure the proper healing of a wound. Meanwhile, the more advanced shaman and healers eventually learned to close a wound by searing it with a hot piece of wood or stone. It was a very painful process, but an effective one. Overall, each of these methods would prove quite effective in healing the majority of the minor wounds. However, if an individual's intestine or an artery happened to be pierced, the chances of their recovery were next to zero.³³

In case of high fevers or some other serious symptoms, the clan's shaman was summoned to administer his medical herbs and potions. Familiar with the many beneficial effects of the various surrounding plants, they would mix a wide variety of plant roots, leaves, nuts, berries, or bark, minerals, pain-relieving plants, and even animal parts to create medicinal potions. Many of these potions did have therapeutic value in dealing with minor illnesses such as slight fevers, colds, or the aches and pains of everyday living. But it should be mentioned that the average nomad didn't live enough to acquire today's most dreaded health problems like heart disease, cancer, or high blood pressure. Many of their internal ailments weren't life threatening, unless of course, they were succumbing to a deadly disease or infection. More often than not, if the shaman's potions didn't help the patient, he or she would resort to magic in the form of charms, chants, and even prayers to the spirits. Later many of these rituals were performed while the shamans were under the influence of some hallucinogenic plant, which they believed gave them a greater insight and keener perception into the spirit world.³⁴

The shamans came to possess a tremendous amount of psychological power over their people. As spiritual authority figures and healers, their exclusive relationship with the unknown powers around them created the perception that they possessed the ability to induce miracles. Through the use of chants, charms, and induced trances, they invoked the spirit world to come to their aid and perform a miracle. In times of need, they would call upon the wind to blow away a child's illness or summon the dark clouds in order to bring rain to a thirsty people.

Genuine or not, as a result of demonstrating their mystical powers, they spiritually dominated our early nomadic societies for possibly close to 100,000 years.³⁵

In fact, their influence upon our religious institutions can be felt to this very day. Evangelistic ministers or priests, rabbis, pastors, and holy men from all over the world will use charms, chants, and prayers to invoke their deities blessing to miraculously cure one of their ailing flock. This usually occurs only after modern science has given up any hope for curing the individual. Undoubtedly, this calling out to god or gods for assistance is indicative of how deeply embedded the old shamans' beliefs and methods had been instilled within our cultures.

Over the span of time, the nomads also gave their future generations something much more important to the present theologies than just ceremonies or sermons. In a very direct way, they gave us the deities (spirits) to protect us, guide us, and to show us the way to salvation. It wasn't by happenstance that the early agrarian societies established polytheism (numerous gods) as their initial religion. These gods didn't just suddenly appear to their agrarian spiritual leaders as deities to be worshipped. They were an extension of the spirits that the nomads had worshipped. It was only later that these nomadic spirits were given human form (anthropomorphic) and renamed as gods by the clergies of the agrarian religious institutions.³⁶

Since the acts of incest and pedophilia provoke such strong emotions within today's general public, it should be remembered that these behaviors are not a unique phenomenon. They didn't just suddenly appear in our present time, due to the decline in our society's moral standards. As a matter of fact, these types of abhorrent behaviors have been a part of human existence long before we ever became nomads. For the last 5 million years of our evolution, they have become in all likelihood an unwelcomed instinctual part of our species. Rightfully viewed as socially and morally outrageous crimes of society, contemporary governments have enacted strict laws to eliminate such behaviors, especially where children have been involved. Yet unfortunately, these behaviors still persist to this day in almost every

society, because they have been and will continue to be a part of our primordial psyche.³⁷

Today, a number of scholars have theorized that the horrors of warfare and the strategic and tactical concepts behind it are uniquely human inventions; and that until our species came upon the scene, the earth was in complete harmony as the surrounding animals peacefully lived together amid the lush green vegetation and gleaming skies. Actually, nothing could be further from the truth.

Long before our nomadic ancestors came into existence, warfare was being continuously waged within the animal kingdom. Between the many different species of mammals, fish, insects, and birds, they have been conducting a continuous form of guerrilla war. The outcome has always been predicated upon which species was the swiftest, sneakiest, strongest, and the most numerous. And when the carnivores weren't locked in a territorial struggle with each other, they were usually attempting to catch and then devour some unfortunate animal that had happened to be at the wrong place at the time. Individually and as a group, the surrounding animals struggle for survival is every bit as savage and ruthless as human warfare. The level of nature's viciousness knows no bounds nor does it spare the young, the old, or the helpless. Thus, we weren't the creators of war nor were we the first species to kill our own. The animals and the other life forms before us have that distinction. While institutionalizing the brutality of it all, we just expanded the conflict by introducing a wider range of weaponry and a higher level of organization.³⁸

Whether the *H. sapiens* lived in the cold northern steppes or the southern forests and coastlines of Eurasia, they struggled against each other with the objective of gaining, retaining, or enlarging their territories. It was a reason the whole clan could understand and enthusiastically embrace. Warfare in and of itself would become an important aspect of their culture. Life without it was unthinkable in a world that favored those who were prepared to arm themselves and seize the fruits of their surroundings. This had nothing to do with blood lust or the inherent human desire for aggression. Rather, it was a cultural choice on the part of the clans to economically secure the

richest territories by sustaining a patriarchal society for the purpose of continuously waging war against both man and animal. The stakes were incredibly high amid a sea of unceasing competition and unpredictable climatic changes. But, the rewards were even greater for the men and women who wanted to prosper. Thus, the very nature of embracing a roaming economy would force the clans to be in a constant state of conflict. Whether they liked it or not, they had to defend their place under the sun against all would-be competitors. The prosperity of the hunt and that of their clans would dictate no less.³⁹

In a sense, the nomads didn't own their territories any more than they could own the sky or the trees. But possession was nine tenths of the law. Those clans that occupied an area, they temporarily claimed as their own, until they either moved to greener pastures or were driven away by a more powerful clan. Contrary to the agrarian farmers who would fight to the death for their land, our roaming ancestors cherished and revered certain places, but they never perceived them as things to own or even to die over. Within their magical world of spirits and incomprehensible forces, the land was endless and a source of life that gave meaning and substance to their existence. It was a gift from the spirits that didn't belong to anybody. Within their mind-set, the idea of fighting and dying in great numbers over a piece of land was beyond their understanding. Thus, nomadic warfare was actually a series of small skirmishes, where the loser was always free to run away to fight another day.⁴⁰

Due to the hunters' need to find game and reproduce as many offspring as possible, nomadic warfare was restricted in scope and considerably less deadly than today's conflicts. Usually fought during the spring and summer months, their tactics were based upon gradually killing off or scaring away another clan's warriors. They didn't fight wars of extermination, because they couldn't afford to lose very many hunters in the process. Thus, the *H. sapiens*' intent was to slowly enlarge their territories by driving away their less powerful neighbors through the slow elimination of their hunters. Later, wars of extermination probably did occur, when the competition for food with the Neanderthals had greatly intensified during the last glacialiation (Wurm-Weichselian) period.⁴¹

When the weather permitted it, our ancestors would conduct raids into their enemy's territories. The raids were usually carried out by a war party, which consisted of a small number of warriors. The main purpose behind the raids was to secretly penetrate an enemy's peripheral territory and ambush a few of their hunters. Much like their primate ancestors before them, their basic strategy was to slowly and methodically kill or maim as many of the enemy's hunters as possible, so that they would eventually be unable to feed their clan or defend their territory. To achieve this goal, the raiders employed a wide variety of tactics such as deceptions, diversions, decoys, and ambushes in order to render the other clans' defenseless. Needless to say, it was a very drawn-out type of warfare. But if the raiders were successful in their mission, they could significantly enlarge their territory.⁴²

Whenever a war party happened to suddenly and unexpectedly encounter another clan's group of warriors, it had become customary from their ancient past to initiate a form of ceremonial demonstration. At the moment of confrontation, it must have been a terrifying spectacle for them to have beheld. Suddenly, the individuals within each group would begin to jump up and down, while they screamed at the top of their lungs and waved their crude weapons up in the air. Among the snarling anger and the dreadful fear, they attempted to intimidate each other through their frightful appearance and ferocious looking behavior. Ordinarily, the group that could scream the loudest, jump the highest, and appear the fiercest could in many instances achieve a bloodless victory against a less determined foe.⁴³

If a group of warriors outnumbered their opponents, these boisterous demonstrations usually produced the desired results. In a moment of clarity, the smaller group would hesitate for a minute and then begin to slowly back away. Occasionally, a few of them would throw their spears at the larger war party as they retreated; but in general, they weren't inclined to stand and fight. Militarily, they specialized in hit and run tactics against a numerically inferior foe. The whole concept of a clan standing their ground and endangering their families' survival by possibly losing most of their bread-winners in a single engagement was beyond their imagination. They viewed warfare as a sort of game to be waged only on their own terms, where their success was assured.

Unfortunately as the last glaciation (Wurm-Weichselian) period began pushing the Neanderthals out of northern Eurasia approximately 100,000 years ago, warfare would take on a whole new dimension in its ruthlessness and ferocity.⁴⁴

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