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THE QUEST FOR EXCITEMENT AND THE SAFE SOCIETY

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INTRODUCTION

In 1926, two years before he died, Fridtjof Nansen, the Norwegian arctic explorer, scientist and humanist, gave a speech at St. Andrews University in Scotland. The speech had the title "Adventure" and Nansen talked about the human need for challenges. "It is our perpetual yearning to overcome difficulties and dangers, to see the hidden things, to penetrate into the regions outside our beaten track - it is the call of the unknown - the longing for the land of Beyond, the driving force deeply rooted in the soul of man which drove the first hunters into new regions - the mainspring perhaps of our greatest actions - of winged human thought knowing no bounds to its freedom" (Nansen, 1927:20). He did, however, not only speak about the deep longing for the ultimate challenges, but also about our everyday lives. "You have to take risks, and cannot allow yourself to be frightened by them when you are convinced that you are following the right course. Nothing worth having in life is ever attained without taking risks." (Nansen, 1927:36). Now one could think that these are the words of a very special person, a risk-taking explorer. What would ordinary citizens say? In a national survey of opinions, attitudes, values and behavior in a representative sample of the Norwegian population above 15 years, 10 percent completely agreed to the statement "I am willing to take big chances to get what I want out of life". 34 percent agreed to some extent. 36 percent disagreed to some extent and only 18 percent disagreed completely. That means that almost half of the population to some extent are willing to take big chances in life. When one bears in mind that this includes not only the young and daring men, but the total population above 15 years, it is a strong indicator of a need for taking chances that is in total contrast to the idea of a safe society. Does this mean that the idea of a secure and safe society has to be given up? Has the safety work failed? Do we have to work even harder to get people to think about safety? Are there big differences concerning safety in different arenas and sectors of society? Are there big and stable individual differences? A lot of interesting and pressing questions arise.

The title of my paper indicates a tension between, on one hand, the quest for excitement and thrills that seems deeply rooted in human nature, and, on the other hand, the idea of a safe society that has been so central in modern welfare policies. My purpose in the following is threefold:

1) To develop a realistic picture of human nature where also the thrills, excitements and risks have their place

2) To see how this picture of man is a realistic background for work on safety and control, especially in the sectors related to work, transportation and home life.

3) To show how this picture of man is a necessary background for the development of a thrill sector in modern society, especially related to sport, leisure, education and tourism.

Let me mention that in my presentation I will state my views as clearly as possible, sometimes provocatively, and without all the reservations and modifications necessary in other contexts.

Some concepts and assumptions

Let me first look closer at some of the concepts that we use. We have concepts that refer to the general interest or need for thrills and excitement. Expressions like "quest for excitement", "thrill seeking", "adventure seeking", "need for stimulation" point to a general need for stimulation or novelty, and more specifically to a need for strong positive sensations or feelings, where ecstatic joy is the most extreme. In psychological theories one uses a concept like "novelty seeking" to express this general disposition. A more specific trait, that has received a lot of attention, is called "sensation seeking", which may be defined by "the seeking of varied, novel, complex and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experience."(Zuckerman, 1994)

The more general quest for excitement, or the specific sensation seeking, may involve risk taking but not necessarily. Sometimes it seems as if risk taking in itself is a strong stimulation, and not only a consequence of, or an adjunct to, the seeking of strong sensations. "Risk" is a concept that is used in several scientific and other contexts and with varying content. In most cases risk seems to involve a loss of some kind (Yates and Stone, 1992). The loss may be related to economic or material factors, to social and personal factors, like status or prestige, or to physical, or bodily, factors like injuries, pain, or even death. One may also risk being prosecuted, become psychologically harmed or being punished. One's self-concept may be put at risk. According to a long tradition in philosophy it is also possible to speak of existential risk, that puts one's total life project in danger (Tillich, 1952). In my own work I have found it useful to distinguish between six forms of risk: Physical risk - the chance of injury or death, Social risk - the possible loss of status or social esteem, Economic risk - the loss of money, property or material assets, Achievement risk - the risk of loosing in achievement related contexts, Political risk - taking political chances, like big changes, revolutions, Cognitive risk - taking chances by giving up old ideas and looking for new.

In many theories in varying scientific disciplines there is a concern for safety and control that becomes evident in the basic concepts. As Mary Douglas repeatedly has pointed out, these concepts and constructs have strong social and cultural underpinnings, and are not neutral or objective in any sense (Douglas, 1992; Douglas and Wildavsky, 1982). Embedded in the construction and use of concepts are several more or less basic assumptions about what constitute "normal" or "acceptable behavior". Man is, for instance, often supposed to be "risk avoiding" and "safety seeking". "Risk taking" is accepted as rational only under certain circumstances. In the discussion of the risk construct Yates and Stone point to the fact that several authors have stated that "in isolation there is no such thing as acceptable risk; because by its very nature, risk should always be rejected" (Yates and Stone, 1992).

In decision theory, and theory of games, the outcomes are defined relative to three conditions: certainty, risk and uncertainty. A situation with risk is a situation where the possible rewards are known, but the probabilities of the rewards are unknown. Under uncertainty one does not even know the possible outcomes. The most favored situation is decision under certainty.

To identify the cultural and normative underpinnings, it may be a good idea to make explicit the alternative levels of risk tolerance; like risk avoidance, risk acceptance, risk taking, risk seeking. These levels refer to varying situational and personal constraints and possibilities. In some situations we have to face risks that are imposed upon us. In other situations we can freely choose the level of risk, like when skiing in the mountains. In some situations we are aware of taking risks, in others not. There are lot of other variations that need not concern us here.

To exemplify different basic assumptions let me sketch two quite different basic normative attitudes to risk that may influence not only the choice of theories and hypotheses, but also the basic concepts:

One basic attitude could be summed up in the following way:

- Man is a risk avoider and a safety seeking being, built on the following principle:
- Avoid risk whenever you can. Try to scan, detect, identify, eradicate and control risks.
- When you have to take risks, take the smallest. Avoid taking risks that involve other persons, without their explicit consent.

This would exemplify a mainly risk avoiding, normative strategy or view. A different normative attitude would be the following:

- Man should try to identify and control risks
- Avoid or eliminate risks where there are no rewards
- Minimize risks where other people are involved
- Take risks when the rewards are obvious and the total expected outcome is positive or optimal
- Seek risks when the odds are good enough, mastery is possible and the total expected outcome is positive.

This would exemplify a risk accepting or even risk seeking normative position.

Some comments upon the concepts of risk and risk taking

I have already used the concept of risk in various ways. Risk is a central concept in several scientific disciplines, that covers various arenas and sectors (Singleton and Hovden, 1987). The concepts and the general terminology vary. The risk in engineering is not the same as in medicine or in economy. Bernstein (1996) reveals that the history of risk is many sided. The ideas of risk in disciplines like mathematics and in special branches of economy seem to be far away from the way people think in everyday life situations. This does not mean that we should not try to make people more rational in their dealing with risk. On the other hand we should be careful to transfer scientific ideals of risk and uncertainty to ordinary life. It may not be a good idea to make people into risk-processing machines or to give an illusion of too exact information about the future. As Bernstein says about Keynes: "Rather than frightening us, Keynes' words bring great news: we are not prisoners of an inevitable future. Uncertainty makes us free." (Bernstein, 1996:229). Uncertainty may be better than probability. "Where everything works according to the laws of probability, we are like primitive people - or gamblers - who have no recourse but to recite incantations to their gods." This means that we are free, our decisions matter, we can change the world. In order to master the world we should not rely upon our probability calculus but upon our skills and mastery. We should confront danger and take calculated risks, but only when we have developed the necessary skills and tools.

Another distinction in relation to risk, that is of vital importance, is the distinction between action and arena. Risk theorists often focus upon individual or collective acts or actions, but I think arena is more important. I was first surprised when we tested climbers, parachutists and other risk sport groups and found that they were moderate risk takers. But it makes sense. When you are climbing you try to remain as safety-conscious as possible and not take unnecessary risks. Since you are on a dangerous arena you may have accidents and problems. The most important decision point is whether you are willing to enter the arena, to take up climbing, or not. On the other hand, people on safe arenas may be more willing to take risks. They may show a more risk-taking attitude. But it matters less, since the risks are objectively very small, whatever line of action they take. In the following, when I speak about risk taking, it is mainly the entering of risk arenas that will be in focus and secondary also the individual strategy or line of action inside the arena.

Two world views: Risk versus safety

Two thousand five hundred years ago two Greek philosophers gave us two quite opposite views of the world, of "kosmos".

Heraklitus from Ephesus, 500 B.C., thought of kosmos as a dynamic process where everything was moving, changing. For Heraklitus the essence of kosmos is captured in metaphors like the streaming water in a river, the lickering flames of a fire, the opposite sides of a "polemos", a fight, a war, the dynamic tension between the bow and string which makes the arrow fly. The world is a world of opposites, of light and dark,

up and down, sweet and sour, pleasure and pain. This dynamic tension between opposites is the "dynamis", the power of change. The deep nature of kosmos is that "panta rei", everything flows or runs.

Parmenides from Elea, 500 B.C. thought that kosmos was a huge round ball, which was in complete rest. Change and movement are illusions. "Thrust your thinking and not your senses". Thinking tells us that the world is perfect and therefore it has to have the perfect shape of roundness and it has to be still. Parmenides' student Zenon, tried in several examples to show how we end up with paradoxes when we accept that motion is possible, for instance in the famous story of Herakles who was unable to overtake the turtle.

The thought forms of Heraklitus and Parmenides shaped our Western tradition. We meet the tension between the two views in a lot of contexts as a tension between movement and rest, process and structure, the dynamic and the static, growth and stability, risk and safety.

The two paradigmatic views of the two Greek philosophers are to differing degrees realized in historical societies. There is an interesting study by the climber and anthropologist Mike Thompson, who shows how different environments and ways of living shape different risk strategies in two different cultures. The Hindu culture of sedentary cattle farmers south of Himalaya, is quite different from the sheep nomads on the North side of Himalaya. The Hindus are safety-seeking and try to spread both risks and rewards. One should help one's neighbor and one should expect help in return. The Buddhists are risk takers who concentrate both risk and rewards. It is typically the Buddhists that have raised and equipped caravans over the high mountain passes in order to trade from South to North and from North to South. One needs to take both economical, physical and social risks to do this and one may become very rich or very poor. Interestingly enough the Hindus are pessimists and the Buddhists are optimists. In many ways the Buddhists seem to represent the Heraklitean world view. The world is a changing, uncertain place where one has to master risks in order to stay alive. One has to be alert. The Hindus seem to have more of a Parmenidean world view, which includes the wish for stability and predictability, but with a pessimistic undertone since the world after all is unstable.

The opposite world views, or social cosmologies, of Heraklitus and Parmenides may, as opposing strains, run right through a society. In Norway we see that the coast culture with its fishing, shipping, trade, and oil industry, represents a risk taking view. On the other hand we have the inland culture with farming, big scale industry, and with institutions as church and state, as caretakers of the safety tradition. In a survey of peoples' attitudes we actually find that the coast people are more willing to take risks. The reason for this is probably the long adaptation to a shifting and insecure environment that favors the open and risk accepting attitude. In his famous novel about the 19th century fishermen who sailed to North Norway for cod fishery, Johan Bojer told how these fishermen not only accepted necessary risk in connection with their job, but loved to compete when sailing North. They liked some of the daring risks and stunts, like sailing water into the boat on one sea wave and then sail the water out of the boat on the next.

Maybe risk and safety are complementary factors, not only in world views, between cultures, inside a culture, between individuals (as we shall see later), but also inside individuals or persons. Moxnes (1989) has developed a psychological theory, where not only the well known need for safety and security is stressed, but also the need for growth, challenges and risks. Each person needs a basic safety, an ontological security, which one should get during the first years of life, if one has been fortunate enough to have a good mother. The father is probably less trustworthy. On the other hand we undergo a fabulous development and growth from conception, through birth and till we die. It is impossible to grow and develop under full security. Therefore we need to accept chances and risks. This factor is, according to Moxnes, closely tied to our need for freedom. On the other hand our need for security is tied to our search for meaning and roots. Our life should according to this view, make a spiral from one level of security, through risky leaps and stages of growth, to higher levels of stability.

The modern idea of the rational safety-seeker

In many ways modern industrial society is obsessed with safety and control. One could say that it has to be so, since modern society is a huge industrial, technological and economic structure which simply must not collapse. One doesn't play with an atomic reactor.

On the other hand one could say that the possibility of this modern society was the idea of taming humans into low active rational safety-seeking creatures. This new view of man emerged during the Enlightenment period in the 18th century. The idea of modernism encompassed progress, science, rationality and control as central factors (Harvey, 1991) . The goal was to create a Dominion of Man that could control Nature and bring Happiness to all human beings. The new industrial, and later the advanced technological society that was developed in the 19th and the 20th century, presupposed the docile and tamed "animal rationale". Without control over impulses and needs, a concern for safety and the well-being of other people, and a rational, long-term perspective on one's own behavior and thinking, it is impossible to run a complex, fragile technological monster like modern society, in a safe way. The many failures and problems in introducing modern technology and life style in so-called Third World cultures are, according to many experts, due to the lack of the modernistic ethos in these cultures. They often lack the long-term planning, the Western rationality, the Protestant work ethic, the achievement motivation, the control of needs and impulses and delay of satisfaction, the sense of well-tempered pleasure and the concern for safety, that has become endemic in the industrialized world. But this attitude is even in Western societies just on the surface and not deeply rooted in human nature. The many accidents and problems show that irrationality lurks under the surface of rationality. It seems that we have a "beast within", that sometimes and under certain circumstances, makes us thrill seekers that not only accept risk but even seek risk.

A lack of fit between modern society and human nature?

I am not in line with behaviorism and similar views, according to which we are totally malleable. We are not born as a "tabula rasa", a blank blackboard. Some people seem to think that it would have been nice if we had been malleable, and could be formed, developed, shaped, according to various historical, social and cultural environments. For work on safety that would have been nice, since we could have developed the necessary relation of fit between man and modern society, and thereby improved safety.

However, more and more it becomes evident that human nature and modern society do not fit into each other as a hand into a glove, or a key into a lock. There is a mismatch between human nature and modern society that is evident in many sectors and also in relation to safety. One can see the problems from both sides, from the side of man, and from the side of society. The risks, dangers, problems, hazards, accidents that are not handled well may have several causes. Some of them are outside our control. Accidents happen due to chance, bad luck, complexity, time factors and so on. Other happen because the human factor is not good enough. Accidents are caused by fatigue, lack of concentration, lack of attention and foresight. Some are due to strong emotions, irrationality, bad temper, irritability, aggressiveness, stress. And other times people simply lack the skill, do not understand things, or lack the necessary insight. As the studies of heuristics in risk-taking have shown, people have many illusions concerning objective security and risk (Kahnemann, Slovic, Tversky, 1986). A special case is, however, the situations where we simply are not concerned about safety, as the only, or primary, motive and often take risks in a conscious, more or less calculated, way. Should we handle this as something that should be suppressed, refined, sublimated, avoided, since it is contrary to a safety seeking attitude or should we accept this "beast within" as part of human nature and try to handle it in the best possible way. There are strong reasons why I think we should accept the "beast within".

Evolutionary Anthropology: a new perspective on risk and safety

Evolutionary anthropology and evolutionary psychology are disciplines that study how humans were adapted to, and formed by, shifting environments through the last millions of years from homo habilis, or earlier, to present man (Staski and Marks, 1992; Buss, 1988). The general picture given by these evolutionary approaches is very different from the picture of man that in varying shapes have been presented in the last 2-300 years by the Bourgeois culture in Europe. The Bourgeois picture projected man as a frail and weak creature that had to compensate the lack of bodily strength through a well-developed brain, and the use of symbolic powers like language, communication, symbols and abstract thinking. The evolutionary picture of man is quite different and portrays man as a being that has a lot of bodily strength and robustness. Humans developed as a hunter-gatherers through 2 million years of evolution, from homo habilis to homo sapiens sapiens, and spread to more extreme climate zones, to more diverse environments, to higher and lower altitudes, than any other animal. Even recently the indians at Tierra del Fuego slept naked in the snow. The bushmen in Kalahari survive in extreme desert conditions, and not only survive, but lead a life that the anthropologist Marshall Sahlins, with reference to J.K. Galbraith, called "the original

affluent society" (Sahlins, 1972). Man has the capabilities that make it possible to lead an elegant life in extreme conditions. Even today we witness the extreme skills and faculties of the "human animal".The deepest free-dive without oxygen is down to more than 120 meter below sea level. Since Habeler and Messner first took the alpine style climbing trip to the top of Everest without oxygen, many people have done the same. I think the quest for risk, the breaking of records, the test of human limits, the exploration of wilderness, are, at least partly, explained by our past. Our evolutionary background made us more active than most animals, we need greater areas to explore, because we seem to feed, not only on food, but on novelty. As already Aristotle noted, man is a philosophical animal with a need to explore, a sense of wonder and the ability to ask "why"? Humans obviously combined exploration with willingness to take chances. They took the chance to leave the life in the trees, stepped down on the ground, and then spread out to all climate zones and geographical areas. Humans thereby became exposed to danger, change, novelty, and risk. This process shaped us in various ways and we developed skills and strategies to handle challenges. We have excellent senses. We have better eyes than most animals and we are one of the few animals that see the world in colors. We have a good capacity for hearing, the senses related to smell and taste are less good. We have sweat glands over the whole body which makes it possible to get rid of heat. Therefore we have a capacity for endurance that makes it possible to run down all types of animals, even if it takes days. As an example of endurance one can just wonder how Alexander the Great on his military campaign in Asia had soldiers who walked 25 km per day, in average, carrying their own pack. Our hunting capacities are very good. Most animals were followed with great knowledge and insight and killed at short distance, seldom more than 20 meter. We have a delicate foot that makes it possible to move silently, hands that have a finger capacity that made us excellent tool makers. The oppositional thumb and the variability in finger grips is beyond comparison. All our robust capacities and our complex skills make us the only animal that can swim a river, carry a load for many miles, run fast for several hundred meters, and then climb up in a tree. It is not surprising that half of the brain capacity is used to control bodily movements.

The picture of man that emerges on an evolutionary background is very different from the modernist picture of man as the rational safety-seeking creature. Man is adapted to a life in the open that involves challenges and risks. This fact must, through selective mechanisms, have been sunk into our genes. It is therefore not surprising that the first personality- related gene that was identified as part of the big human genome project, was a risk-taking gene (Cloninger, Adolfsson, Svrakic, 1996). This supports Zuckerman and Eysenck's twin studies that found that 70 percent of the variation in sensation seeking was due to genetic factors (Zuckerman, 1979).

The distribution of sensation seeking needs in a population seems to follow a normal distribution pattern. Several studies suggest that around 10 percent of a population are typical high sensation seekers with marked characteristics in attitudes and behavior. This fits nicely in with the Norwegian study of the population above 15 years mentioned earlier. 7 percent agreed completely and 14 percent agreed to some extent to the statement "I am interested in doing things that are dangerous or forbidden, just to experience something exciting and risky". 8 percent said they agreed completely and 33 to some extent to the statement "I like the challenges that I meet in unexpected and muddled situations". This means that even people who are socialized and educated into a Nordic welfare society are not the docile safety seeking creatures that the modernistic rationality has encouraged them to be. It seems that under the skin of the soft rational modern man we have a "beast within" that thrives on strong stimulation and that is willing to take chances to get what it wants from life. This is true for at least half of the population. There are some variations due to age and sex. Men take bigger chances than women, the young more than the old. But even among old people there are risk takers. Trygve Gran, the first man who crossed the North Sea in an airplane, thought it was rational to take more chances as you grow older because you have less to loose and more to win! In the Norwegian study it is not specified what kind of chances and under what circumstances people would take risks. But there seems to be a general attitude that will influence decisions and actions in more specific areas. This explains why people not only do dangerous and risky things in a well-defined sport, like race car driving, but also take the risky driving attitude with them when driving to the job, or trying to impress some friends on a Saturday evening. To see how a general attitude like sensation seeking spills over into various areas of life, we will look closer at Zuckerman's theory.

Sensation seeking

Zuckerman's sensation seeking theory entails the following:

1. The need for stimulation is genetically conditioned and follow a normal distribution curve. General social and cultural factors seem to be of little influence. Experiences in life and interaction with brothers, sisters and peers seem to have some importance, but not as much as the genetic contribution.

Table 1 Zuckerman's sensation seeking theory

Genetic level	Biochemical level	Traits, attitudes	Behavior
70% genetic influence	Enzymes, MAO Neurotransmitters (dopamine, norepinephrine)	Thrill and adventure seeking Experience seeking Disinhibition Boredom Susceptibility	Occupation Type of sport Driving Alcohol, tobacco Drugs Risk

2. Some of the physiological differences between high and low sensation seekers are known. High sensation seekers have low levels of MAO, an enzyme that controls neurotransmitters that are important for various aspects of brain function. The high sensation seekers are more orienting in their behavior, react with faster adaptation to new situations, feel stimulation less intense and seem to have stronger pleasurable reactions to stimulation.

3. Sensation seeking builds on four sub-factors: "Thrill and adventure seeking" contains physical thrills like scuba diving, parachute jumping, fast skiing or diving from a high board. "Experience seeking" relates to inner experiences, like yoga, music, drugs and to new experiences with strange people or faraway places. "Disinhibition" refers to partying, flirting, drinking, gambling, sex. "Boredom susceptibility" describes a restless seeking of stimulation, and avoidance of boredom of any sort. The sum of the four scores on the sub-factors makes up a persons total sensation seeking score.

4. Sensation seeking is a disposition that leads to specific behaviors. High sensation seekers prefer occupations with human interaction, fast decisions, challenges and risks. They typically become pilots, fire fighters, salesmen, investors, business founders, special forces in military and police. They drive faster and better, but are involved in more accidents. They prefer music which is loud, complex and modern, paintings that have a crash of lines and colors. They like spicy foods, drink more and more varied, are more likely to try new drugs, but don't necessarily get hooked. They are involved in the more violent and risky crimes. In sports they prefer high risk sports, are involved in more sports and experiment with new sport forms. In general high sensation seekers live at higher stimuli intensities which match their own energy and needs. Since they are optimistic they are willing to take higher chances and risks to get what they want from life.

Zuckerman's theory, which is well documented through a lot of empirical studies, shows very clearly how a general attitude to life spills over in various specific life sectors and influences behavior in many unexpected ways.

Risk and modern society

Of course we want safety, security, control, predictability in a lot of areas. Even high sensation seekers want that. We want, for instance, technological risks to be as small as possible. Bridges, cars, atom reactors, airplanes, should be safe. We want other people to behave in a responsible and predictable manner in traffic and transport.

At the same time people want to take risks. But risks should be taken in the right or relevant manner. We don't want to get hurt or die by uncontrollable and irrelevant risks. Risks must come in the right or relevant way. If I go climbing I want the rope to be secure, the equipment to be dependable. I know that there are risks in climbing but they must come in the right way, be relevant. And which risks are relevant? The

relevant risks are those that can be predicted, controlled, mastered, dealt with by me through use of my skills. It is like the relation between truth and knowledge. My belief that it is snowing on the North Pole at a certain time may be right. But unless it is the snowing on the North Pole that causes my belief we do not say that I have knowledge. If I guess something and I am right my belief is true, but I do not have knowledge. In a similar manner my risk taking should be related to the relevant risks in a certain manner. I think man needs challenges, and most people want to master risks, in a relevant way. This is typically what we do in nature or environments that pose definable challenges to us. I think we need to develop a society where this is possible. Let me sketch a vision of society and human life where risks are included.

I think children should be given more opportunities to play outdoors, be active, explore the world, develop skills, get strong bodies. We should let the children freeze a bit, get wet, starve a bit, get hurt, face problems, in order to develop resistance to stress and pain. It is not in their interest that we overprotect them. Our kindergartens and schools should give more opportunity for vigorous play. The adolescents should be given opportunities to take part in challenging sports and activities, trips into nature or new environments. For the adult population we need arenas where people can test themselves, get challenges, develop skills, get to know themselves, who they are and what they can. They should, if possible, get a taste of real nature, of solid earth, running water and natural elements like sun, rain, snow. Why? Because we have a biological craving or taste for this life beneath our cultural skin. These are the challenges and environments we are built to live in and to handle. We need to save the wilderness around us, but also the wilderness within us. We need to let "l'homme sauvage" get a fair share of our life. I think it is in this way that we can get some of the problems out of the sectors where they do not belong. People should drive fast at the motor sport arenas and not in the traffic. They should "get high" in sky diving instead of by cocaine, they should fight in games like soccer, rugby or American football, instead of in the streets or in the wars. People are already trying to get these sort of experiences, but society is not yet ready to develop opportunities and arenas.

In USA Today Monday, November 17, 1997 we could read an article by Jim Pinkerton telling us:

> "What propelled John Denver to his death? Here was someone who spent the '60s singing folk songs, rather than fighting in the Vietnam War or even visibly protesting it. And yet a few weeks ago, the man who seemingly had dedicated his life to the mellow pleasures of country roads and Rocky Mountains highs, climbed into a motorized ultralight airplane, the Long-EZ, which had been involved in 61 crashes since 1993, taking 21 lives. He must have known the flight off the California coast was potentially perilous, and yet he made that last leap. Why would former president George Bush want to jump out of an airplane, as he did last summer? Why is Jon Krakauer's Into Thin Air, about the death of climbers on Mount Everest, a fixture on the bestseller lists? Why have Arnold Schwarzenegger and so many others bought a Hummer, the civilian lookalike of the Army's Humvee? And why is just about every car maker adding its own sport- utility vehicle - even such upscale and traditionally sedentary marquees as Lincoln and Mercedes Benz? Why is it that seemingly every time you turn on a TV you are confronted by an endless array of "extreme sports"? America does indeed seem overrun by iron men, triathletes, daredevils and dirtheads; legions of rock climbers, fattire racers, ultramarathoners, bungee jumpers, and hang gliders are all climbing, racing, running, jumping, flying - and occasionally dying - in this new age of go-for-it extremism."(Pinkerton, 1997)

So should we then prohibit some of the risk sports? No, not at all. I agree with Joel Feinberg who is critical of the general paternalistic attitude to risk-taking (Feinberg, 1986). I think people, provided they enter the sports by free will, should be allowed to take risks, get hurt, get injured, or even die. What about costs for society and the risks for rescue personnel? The risk takers should have opportunities to get insured, to pay premiums. The rescue personnel should be freely recruited people with no obligation to risk their lives. There are various ways to solve these problems.

Elias and Dunning have in their book Quest for Excitement presented some reasons why we seem to have an increase in need for thrills and excitement (Elias and Dunning, 1986). The civilization process runs in two directions. Control is compensated by excitement. If society gets too safety-oriented people will find arenas during their free time, to get the thrills and challenges that belong to human life, as they did with soccer and rugby in 19th century England. I would add that such thrills need not be explained, as in the case of Zuckerman, by a biological need for sensation seeking, but rather by the inherent pleasure and

satisfaction that such pursuits provide. This idea is central in the flow theories of Csikszentmihalyi (1991). Deep flow is an autotelic experience, sometimes in the form of a peak experience, encountered when one masters an activity with a certain perfection, is totally involved, feels control, and gets immediate feedback.

Elias and Dunnings theory may also be developed in the direction of a risk homeostasis theory. If the risks and challenges in some areas of life are reduced, there is a relevant increase in risk taking in other areas. The empirical support for such a general theory is difficult to get, because of difficulties in assessing the relevant risk parameters.

Risk may also increase in unexpected and non-planned ways, not only in leisure and freely chosen areas, but in the areas where most people want security and safety. Part of the sociological theory of Giddens and especially Beck's idea of a risk society point to the unexpected consequences of an advanced technological society (Giddens, 1991; Beck, 1992). Due to the complexities, size and dramatic consequences of failure, many industrial and technological devices and plants put people and environment at risk to a higher degree than before. Nuclear waste, chemical substances, biological warfare products, are just symptoms of possible runaway processes.

However, the risk in modern society may also be placed at the core of human existence. Giddens thinks that modern life has a personal or existential risk. Whereas health risk has been reduced during the last 100 years, the personal risk has increased. More than earlier we are free to choose our life course, plan our life, develop our life as a "Gestalt". We are not victims of social background, class, cultural constraints, economic poverty, to the same degree as earlier, at least not in the well developed welfare societies. But this means also that there is no excuse if one's life becomes a failure or a misery. One of the paradoxes in present society is that as life becomes tougher and more risky, in the existential sense, we raise children, educate youth and influence adults to get softer with less tolerance for pain, injuries, stress, problems. It seems to me that in the next century we need tougher and more risk-taking both boys and girls to run the risk society that we create.

CONCLUSIONS

Let me try to sum up my main standpoints:

1. We need a more realistic picture of man as a) formed by evolution and with a genetic heritage that reflects earlier life conditions. b) This heritage is still alive and it predisposes man, not only to take chances and risks, but to react positively to the challenges they involve, and therefore actively seeking thrill and excitement. c) Through genetic makeup and social and cultural influences there are individual and situational differences in sensation seeking and risk taking. While around half of the population like to take some chances in life, around 10 percent are typical "high sensation seekers".
2. We should try to develop a society which is safety-concerned in all areas where we want safety, for instance in most situations at home, during transport and travels, at work, during research projects, and so on. Since man is not by nature able or willing, to take the necessary precautions in these areas, strong incentives with feedback loops are needed. That is why we need "Safety in Action".
3. Man evolved in a challenging, variable and often risky environment and developed a quest for excitement, a need for challenges, a seeking of strong sensations and a willingness to take risks. Even if there is no valid inference from an "is" to an "ought" I think that we should develop high sensation seeking arenas in modern society. This is an important challenge for sectors like sports, recreation, tourist industry, educational institutions, health and rehabilitation centers.
4. In order to master our modern, or post-modern, Heraklitean world, which is dynamic, shifting, risky, innovative and with a fast turn-over, we need to educate children and adolescents through programs and environments that are challenging for the whole person. As Giddens has pointed out, life in "high modernity" need persons that have the skills, the responsibility and the freedom to master the possibilities, but also the dangers that lurks. Life in the "risk society" may become very fulfilling but also very tough, or even disastrous. That is the "condition humaine" entering the 21st century.

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