## Survival, Society and the Seven Year Ich

## K. Michaelian Instituto de Física, Universidad Nacional Autónoma de México A.P. 20-364, 01000 México D.F., Mexico

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Nature goes to great lengths to insure variability in species as survival insurance against an unpredictable change of the physical or biological environment. Maximum populations, sexual reproduction, judicial control over natural mutation rates, and a finite life span correlated with the variability of the local environment, are just some of the more apparent tactics nature has developed to keep individuals diverse and dispersed into their Eigen quasi-species [1].

Given the key importance of sexual reproduction in providing diversity (as for example, over the more primitive asexual, bacterial division) it is not unreasonable to assume that nature, through natural selection, has taken measures to ensure that maximal benefits are derived from this resource consuming fulfillment [2]. Indications of this optimization, for example in relation to the aspect of mating, are the heightened sexual attractiveness of the potentially most fertile females [2] and the sexual receptiveness of females to the potentially most fertile males. A more direct indication of this optimization is the great sexual appetite for distinct sexual partners throughout the life history of all animals.

With the evolution of human society and the development of technology, human survival became less dependent on diversity, as direct neutralization or control of the local environment became possible. However, the individual had to become educated in order to maintain the continuity of the beneplasent society, which could thus stabilize and improve this control over the environment. The greater the control attempted, the more technologically advanced the society had to become, and thus the longer the educational period required of the sibling. The traditional family unit, with clear division of labor, allowed devoted matriarchal attention to the siblings education, and thus a most efficient vehicle for the integration of the individual into the operation of an ever more technological society.

For the early part of human history, until well beyond the early tool making stage of at most 500,000 years ago, biological evolution kept pace with the societal evolution and behavior of the individual within society was based on instinct programmed within the hypothalamus, as it is today in most animal societies. Recently, however, as a result of the efficiency of the technological revolution, societal advance in terms of technological evolution has out paced human adaption as measured by biological evolution, and displayed behavior has lost syncronisity with genetically programmed instinct. Instinctive urges must now be continually repressed in order for society to function at its optimal and thus obtain maximal control over the environment. The repression is exercised by the very instrument which has allowed the accelerated rate of societal development, the cerebral cortex. By the time the individual is an active player in society, the cerebral cortex has been throughly indoctrinated with the information necessary for assuring survival of the new organism, the society.

This paper considers one result of such hypothalamus-cerebral cortex conflicts, which is now leading to the increasingly common breakdown of the institution of the family. The thesis presented above is

delineated and argued below.

- 1. The basic reason for the creation of the institution of marriage was to forcibly maintain the family unit long enough for the adequate education of the siblings.
- 2. Natural selection hardwiring of human behavioral characteristic in the hypothalamus (instinct) had developed to a point in concert with a maximal sibling educational period of roughly 5 years.
- 3. After this nominal educational period, instinct urges a separation of the sexual partners, since it is seen, from the antiguidated evolutionary perspective of nature, to be of greater selective advantage to increase diversity rather than to continue the educational period, especially when human populations were small.
- 4. Conflictive behavior between conjugals, starting at 3 to 5 years after the birth of the first child is natural and evidence that our much longer societal educational period, reaching up to 20 years, is causing natural unions of 3 to 5 years to be stretched far beyond their design limit.
- 5. A physical factor, such as a regulatory gene, probably exists which initiates the conflictive behavior in the conjugals. Another possibility is a slow (or sudden) decline in the sensitivity of the individual to the partners feromonas.

This conflict, although having existed to some extent for at least 8000 years since the beginning of society, has only recently become notorious as society has become more forgiving of discentors as new institutions have taken over the educational duties of the parents, leaving them free to satisfy their evolutionary instinctive urges. The following evidences are used to support this theory;

- 1. Conflicts between conjugals, especially those which marry early in their reproductive years, begin within 3-5 years after marriage.
- 2. There is a general decline in the sexual attractiveness of the conyugal starting around 3-5 years after marriage.
- 3. A child's learning curve is greatest from 2-5 years of age.
- 4. In many animal families the male leaves, or is driven from the home by the female, once the education of the offspring is complete.
- 5. Diversity between siblings of the same parents is significantly less than between siblings that share only one parent in common.

## References

- [1] Eigen, Quasi-species.
- [2] S. A. West, A. D. Peters, "Paying for sex is not easy" Nature, VOL 407 26 OCTOBER 2000. Oct. 26 (2000).
- [3] Sex drives birds apart Nature ??, Mar. 15 (2001).