

UFONAUTS: HOMO SAPIENS OF THE FUTURE?

by MICHAEL D. SWORDS

ABSTRACT

Current evolutionary theory now sees the possibility of dramatic changes in structural appearance due to small changes in *regulatory* genes (those genes which control the rates of growth and development). This concept has reinstated the theory of "Man as Fetal Ape" as the leading hypothesis for explaining the change of form from ape-like to human. By projecting a similar structural shift in our future, it is possible to construct a picture of a potential next stage in human evolution. This potential "descendent species" is strikingly reminiscent of the occupants in most of the well documented close encounter and abduction cases in ufology. If the "ufonauts" were to turn out to be future forms of Homo Sapiens, then many mysteries in the UFO phenomenon would disappear.

THE "NEW" HUMAN THEORY

Ape. Ape-man. Man-ape. Man. How did we really come to be? Oddly, the answer to this question may reflect upon not only ourselves but upon the UFO mystery as well.

Everyone is familiar with the standard conception of the evolution of our species from extinct ape-like ancestors. It seems as though every other month some palaeontologist discovers the chart of our heritage. But gaps and questions still remain. All across the fossil record, in fact, there seem to be "moments" of jumps in biological forms. It is as if evolution cruised along quietly for tens of thousands of years and then, BANG!, an abruptly changed structure arose. This realization has convinced many biologists that episodes of rapid structural change are commonplace in Earth's history, and the new theory is called "punctuated equilibrium." But what is the case?



Figure I:
Although human and great ape genes are 99% identical, the structural forms differ markedly. (Drawing in imitation of that by S.L. Washburn, U. Cal., Berkeley).

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UFONAUTS, Continued

When we compare the human form to that of our nearest genetic "cousin" on Earth, the chimpanzee, we see many similarities of course. But there are significant differences as well. And yet when we compare ourselves genetically to the chimps we are nearly identical. As someone has recently phrased this: the genes fit, but the bodies do not (see figure one). How can this be? How can we have nearly identical structural genes, yet quite large structural differences in some areas of our bodies? The answer, it seems, is "neoteny." And this is one of the genetic tricks by which Nature can produce leaps of structural difference, "punctuated equilibrium."

In the 1920's anatomist Louis Bolk was struck by the similarities in structure not of humans and chimpanzees, but of humans and fetal chimpanzees. Almost all the easily recognized physical differences between ourselves and the apes are much much closer when comparing our forms with embryonic ape forms. Bolk's conclusion: Homo Sapiens is,

physically, a fetal ape, which has become sexually mature (see figure two).

This phenomenon of a "fetal" or "larval" form of species bypassing the normal physical development and becoming sexually mature turns out to be quite common in animals even today. Many species of amphibians are capable of it due to simple temperature changes in the lakes wherein they breed. Sometimes the changes are permanent, and a seemingly brand new physical form pops up on the ecological landscape from "nowhere." This "retention of fetal or ancestral characteristics in some organs" is Neoteny. It is a change *not* in gene structures, but in the mechanisms that govern the *rates* of their functions. Thus creatures with the same genes, but working at different rates, can appear remarkably dissimilar.

FUTURE EVOLUTION?

Since neoteny seems the major candidate for explaining the coming-to-be of humans from the past, what might be predicted for the coming-to-be of

humans in the future? Will the Arrow of Evolution continue to alter our structure? Or will our technology negate its effects? Without being able to predict the future of our struggle to adjust to our own inventions, it is impossible to say whether "natural" selection will continue to operate on the human species. But we could look at our fetal forms and speculate as to the potential for structural change resident there, and whether some of those changes might be valuable.

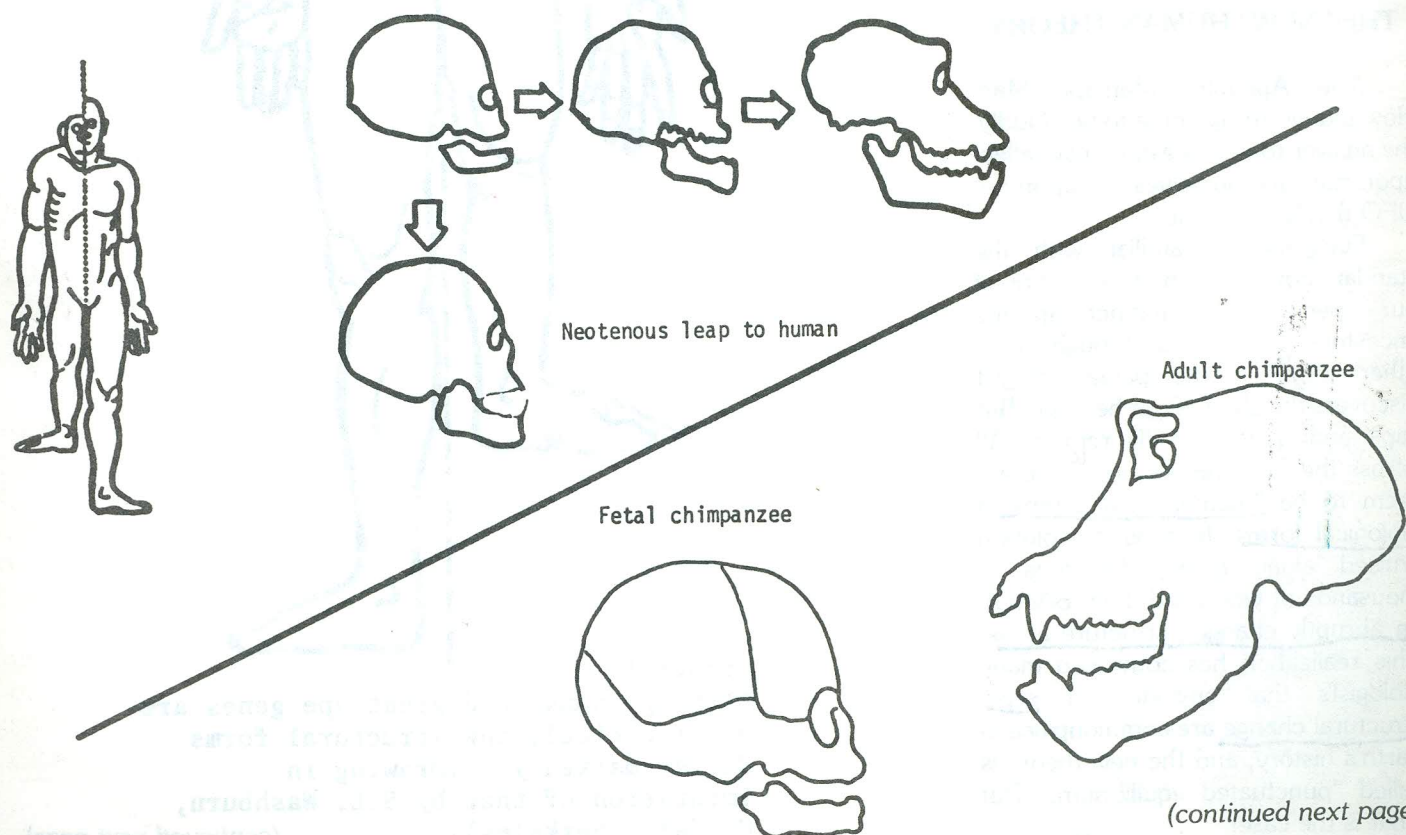
As we have seen some of the major changes of past neotenuous evolution from apes to humans have involved the brain and the features of the face. Comparing these features in adult humans and human fetuses, we note the following:

- 1) The brain of the fetus is again larger in proportion to the body than that of the adult;
- 2) The cranium to contain the brain is again more domed and prominent;
- 3) The eyes have remained large, but the nose, mouth, and ears are diminished;

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Figure 2

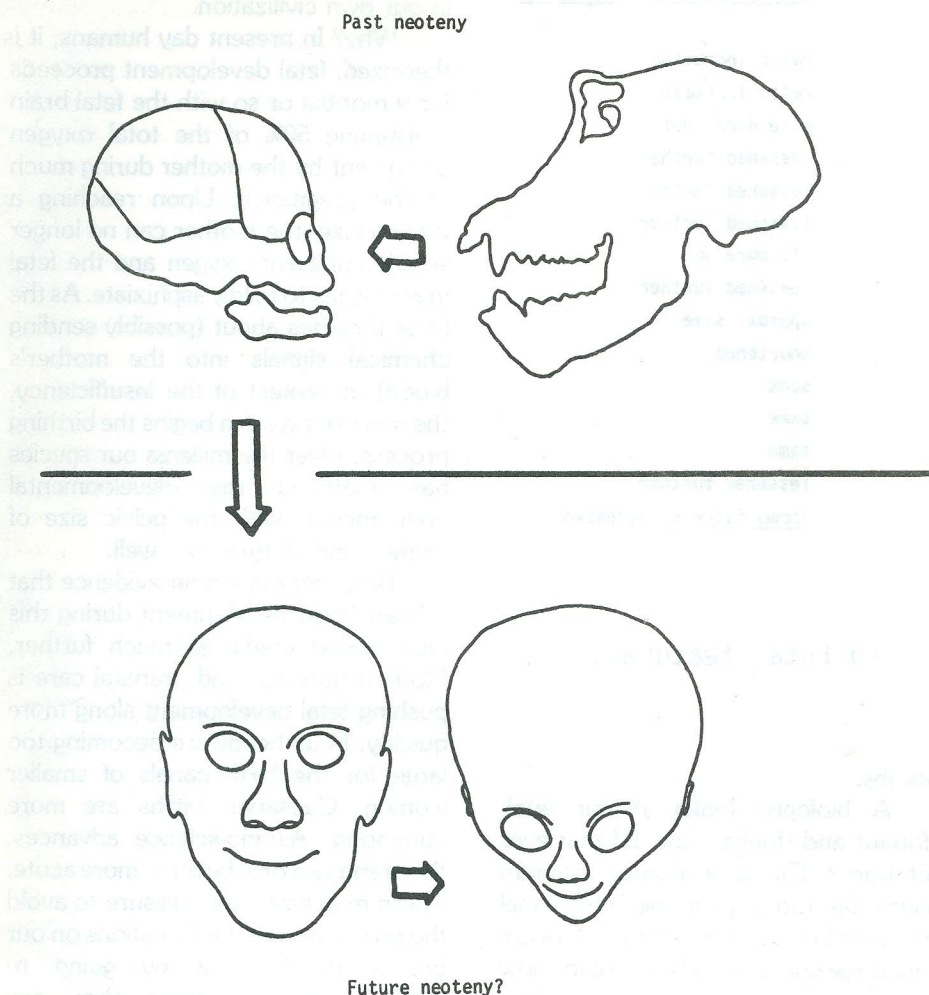
Normal chimpanzee development



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UFONAUTS, Continued

Figure 3



4) The jaw and chin bones are smaller, and the bones of the cranium less massive (see figure three).

Elsewhere in the body, we find that many of the changes of ape-to-man seem to have gone as far as they can or will go. For example, comparing adult humans and fetuses:

- 1) the thumb is readily opposable in both adult and fetal human; the big toe is not;
- 2) the positioning of the skull on the vertebral column is such to allow straight-standing, eyes-front posture in both;
- 3) the positioning of the pelvic girdle attachment is appropriate for straight-standing as well;
- 4) the proportions of limb lengths to trunk length seem to be relatively the same.

Other changes in structure and appearance lead us into the morass of the effects of the pituitary, since this

gland is intimately involved with gene-regulation mechanisms (regulation of growth rates) via its hormones and the systems throughout the body, which they affect.

1. Concerning stature: since we are tall relative to most apes, we think of our evolutionary leap as bringing tallness with it. It didn't. In fact, alterations of growth toward a more fetal type might be expected to reduce height, at least initially. Why? Because we're envisioning a more rapid rate of sexual maturity vs. physical robustness, and the puberty hormones signal that the end to long bone growth is coming in humans. Our early ancestors, it is known, were short. They averaged 112.5 cm (3 ft. 8 inches) in height. Our subsequent growth at least partially reflects pituitary gland malfunction of current humanity may be relevant here: congenital isolated growth hormone

deficiency, also known as "sexual ateliotic dwarves." These individuals have a block in the effectiveness (i.e. a rate-regulating problem) of pituitary growth hormone (somatotropin). It causes dwarfing (individuals of 2 ft. 11 inches to 3 ft. 11 inches high) with near normal body proportions and disproportionately large (though not "fetal") heads. They do mature sexually and can reproduce. This is quite near to a neotenus gene-regulatory phenomenon involving perhaps only one gene. It would seem to indicate that a neotenus jump of the type speculated upon above is well within the potential of the human gene pool. And it may focus upon the 3 to 4 foot stature level as the probable first approximation as to the expected height of the new form (see figure five).

2. Skin characteristics: if you ransack the medical literature looking at the effects of altering the pituitary function, you find many effects which are lethal. It seems obvious and justifiable to toss these in the garbage and not litter our discussion, since, if the changes we're imagining included "killer" problems, such "variations" would never survive. It would be an evolutionary loser and be eliminated immediately. Only combinations of traits which can survive need interest us. One common characteristics which changes in pituitary-related diseases which probably no longer need be lethal or even hazardous in a technological world involves skin pigment. Both in hypophysectomy (removal of the pituitary) and Simmonds Disease (a pituitary dysfunction problem), as well as a related thyroid gland problem (Myxedema), the skin loses pigment. Very pale, almost albino-like skin is a common theme. Along with the paleness, the texture of the skin often changes as well. The skin becomes dry; sometimes puffy; sometimes waxy. The amount of superficial body hair diminishes and becomes finer. These effects are largely true in the fetus itself, of course.

3. Some miscellaneous characteristics: most of the other pituitary-related changes in these defects are obviously "out" as far as evolution is

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UFONAUTS, Continued

<u>Apes</u>	<u>Human Form</u>	<u>Human fetus - Future Human?</u>
large cortex	increased (2 x)	ratio increased
large cranium	increased	ratio increased
partly domed	more domed	more domed yet
heavy jaw	lessened	lessened further
large lower face	lessened	lessened further
large ears	lessened	lessened further
head forward	more upright	sl. more so
much body hair	lessened	lessened further
long armed	shortened	approx. same
short legged	lengthened	shortened
thumb opposed	more so	same
big toe opposed	lessened	same
pelvis angled	more upright	same
massive bones	lessened	lessened further
long in womb	sl. increased	? <u>homo futuris</u> increased

TABLE I.

A comparison of Ape, Human, and Fetal features.

concerned (ex: senility, diabetes, hypoglycemia, adrenal cortex atrophy, emaciation and debility, etc). A few of the others might be tolerable, though.

A) Nitrogen-loss (less protein-storage, therefore less musculature). A technological species would be less dependent upon their own brute force and therefore might easily find a lighter build more energy efficient; maybe they'd even live longer.

B) Lower metabolic rate (and lower body temperature). Along the same lines, to a point this could be an advantage. As has been said of our life span "the hot clock ticks faster," and the hotter fire consumes itself more quickly (see table I).

UFONAUTS AND ARTIFICIAL BIRTH

If close encounter witnesses are describing the "typical" small "fetoid" ufonauts accurately, and assuming that they really exist, then there is a serious biological problem with their form. This problem evaporates, however, if we envision the use of a hi-tech reproduction technology: artificial

wombs.

A biologist looks at our fetal-ufonaut and thinks: how did that ever get born? The large domed cranium seems far too big for the birth canal indicated by the pelvic width. There are only three scenarios which would allow this:

- 1) birth could occur "earlier" in brain and cranial development than it would in humans, thereby making the birth diameter of the head very small.
- 2) sexual dimorphism in ufonauts could be very great with the females (of which we must have seen none in the encounter cases) having very large pelvises proportionately;
- 3) natural delivery could never take place in this hi-tech civilization, and the large domed craniums would be a result of their liberation of their genetic potential from the limits of their small birth canals.

Scenario "1" is unsatisfying since it would birth a very incomplete being, requiring a lengthy post-birth vulnerability period. Scenario "2" is possible, even though it would be out-of-line for advanced "Earth-type" forms. It also probably requires a strict separation of male and female tasks in that civilization. Scenario "3" is not only

a feasible explanation of the structure, but is a technological development which might be considered likely even in our own civilization.

Why? In present day humans, it is theorized, fetal development proceeds for 9 months or so with the fetal brain consuming 50% of the total oxygen being sent by the mother during much of the pregnancy. Upon reaching a certain size, the mother can no longer supply sufficient oxygen and the fetal brain begins to mildly asphyxiate. As the fetus thrashes about (possibly sending chemical signals into the mother's blood) in protest of the insufficiency, the mother's system begins the birthing process. Over the millenia our species has matched this developmental phenomenon with the pelvic size of women and all turns out well.

But, there is ample evidence that human brain development during this fetal period could go much further. Modern nutrition and prenatal care is pushing fetal development along more quickly. Fetal heads are becoming too large for the birth canals of smaller women. Caesarian births are more common. As bio-science advances, this trend can only become more acute. There may easily be pressure to avoid the problems and the limitations on our brain's development by going to artificial wombs when they are developed. And once such cultural choices become commonly made, the doors to "artificial selection" and genetic engineering of the species are wide open.

GENETIC ENGINEERING

We tend to think that even though we are willing to stock breed all our familiar animals in the extreme that we will never do likewise with ourselves. We may be kidding ourselves. The technologies of artificial insemination, test tube babies, sex predetermination and cloning are already largely in place. The science of genetic engineering is pursued more hotly than any area of basic research. When college students are asked whether they would use a cheap, safe and effective sex-choice technology almost half say they would.

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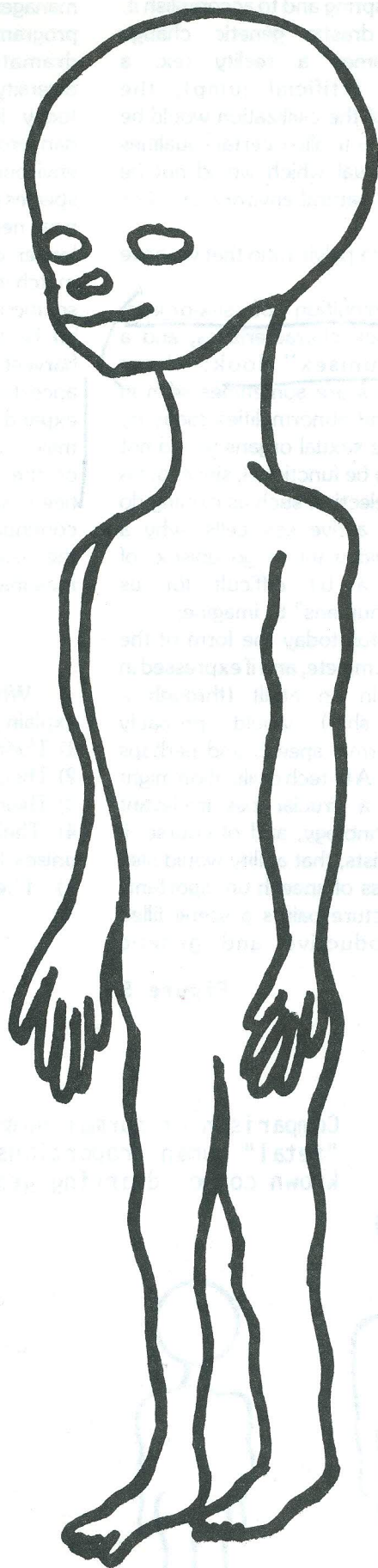


Figure 4

General proportions of the developed fetus

UFONAUTS, Continued

And almost 100% of all parents would like their children to be healthy, bright, and good-looking. Controlling the genetic potential for these characteristics is well within our current concepts of genetic choice and engineering, even though the reality is not here yet. This author considers it highly probable that we will use these powers extensively in the future, rightly or wrongly.

As centuries go forward and technical complexity increases in our world, the pressure for selecting greater intelligence in our offspring might be inescapable. The genetic switch to our next "neotenus jump" in evolution might be seen as the proper course to take. Alongside this pressure an analogous march toward "perfect health" may well be going on. Once most major killers have been eliminated the choice to genetically select those individuals who are resistant to the remaining few fatal defects may be imperative. Why have a child with a 120 year life expectancy, when you could have one of 300 years? Very precise genetic reproduction, perhaps cloning (the simplest precise method), would be attractive and "logical." The point is this: with increased technology it becomes easier to rationalize genetic

choice in offspring and to accomplish it.

When drastic genetic change finally becomes a reality (ex: a neotenus artificial jump), the technology of the civilization would be so advanced as to allow certain qualities in the individual which would not be possible in a natural environment. For example:

A) the head-to-pelvis ratio that we have mentioned;

B) the diminution of sex-organs, secondary sex characteristics, and a general "unisex" look; these characteristics are sometimes seen in pituitary gland abnormalities today by the way. The sexual organs would not even have to be functional, since forms of genetic selection such as cloning do not require active sex cells; why a species would want to go unisex, of course, is a bit difficult for us "unevolved humans" to imagine;

C) In the fetus today the form of the larynx is incomplete, and if expressed in that form in an adult (through a neotenus shift) would probably eliminate normal speech and perhaps speech at all. A hi-tech civilization might make such a crucial loss irrelevant through technology, and of course, if telepathy exists, that ability would also make the loss of speech unimportant.

This picture paints a scene filled with reproductive and genetic

management. Such a species-wide program would be very likely to dramatically narrow the genetic diversity of the species, just as it does today in our agriculture. This is a dangerous game. If some factor in the environment changes, the entire species could be threatened. Or if some new need arose, the species may no longer contain the traits necessary to match it. If it was available, a convenient solution to these problems would be to go back to the genetic "roots," and harvest the cells of your pre-selection ancestors. A need to revitalize and expand the future "gene bank" would make meaning of some of the behaviors of the "abduction examinations." A need so great as to threaten the continuance of the species might make the risk of meddling in the past a reasonable choice to make.

SUMMARY

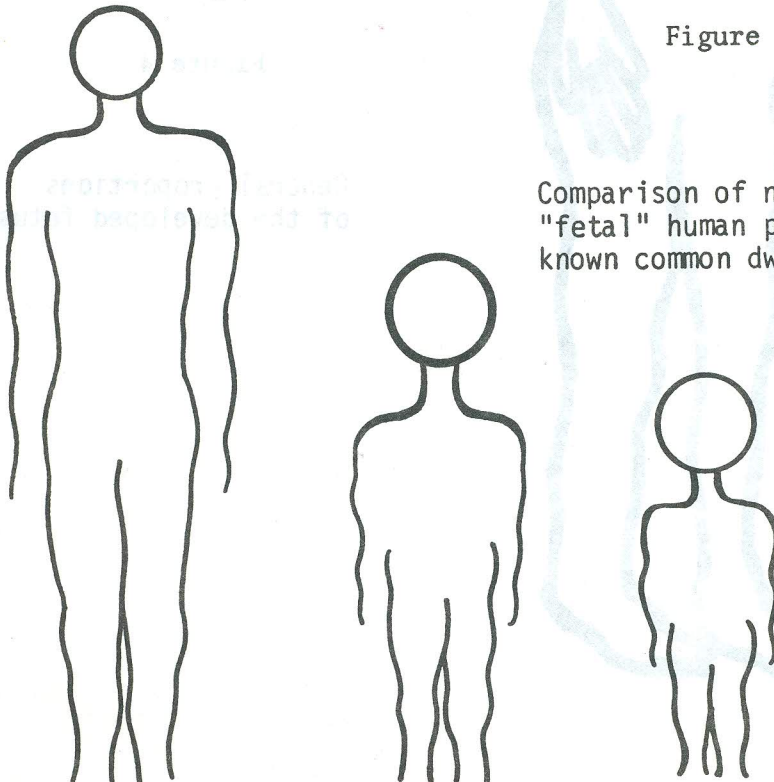
What does the Neoteny Theory explain about the "ufonauts?"

- 1) Their facial features.
- 2) Their general build proportions.
- 3) Their lack of hair and pigmentation.
- 4) Their sex-organ diminution; and unisex look.
- 5) Their head-to-pelvis anomaly

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Figure 5

Comparison of normal human form and neotenus "fetal" human proportions ranged according to known common dwarfing genetic defects



UFONAUTS, Continued

(artificial birthing).

6) Their lack of normal speech.

7) Their abduction behaviors.

8) Their need not to interfere in obvious ways with their past.

9) Their need to create a sophisticated campaign of unreality (in order to ensure non-interference).

10) Their ability to breathe our (and their) atmosphere.

11) Their non-need to go great spatial distances (only to go *temporal* distances, which may involve no spatial involvement).

12) Their general interest in us (their ancestors).

13) Their possible association with — "old-style" (non-neotenus) *homo sapiens* in the same craft.

In sum, the idea has within it potential answers for all the commonest objections to ufo-anecdotal descriptions. But it brings up a pair of very large objections in their place, namely:

1) How in the world do you travel in time?, and is it even imagineable in a rational universe?

2) This theory is essentially post hoc, and those few things which it might predict are things which are likely never to be testable. This unfortunately condemns the theory scientifically, and consigns it ever to be a speculation.... except for some lucky person with personal experience and internal knowledge of what may be going on.

So why bring this idea to the fore, if it is not likely to be testable? There is no requirement in *life* that all ideas be testable; only to be respectably *scientific* must this characteristic be present. Some ideas which fall beyond the abilities of the scientific method *may* nevertheless be true. It is just that science and confidence should not be built upon them. And, who knows, perhaps as the UFO phenomenon goes on, some bits and pieces of concrete evidence may piece together to unexpectedly support one of the several leading theories, including this one. If so, we may be able to say to our local USAF base commander:

Sir, we have met the aliens, and they are us.

STARS & PLANETS

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Bright Planets (Evening Sky):

Venus begins the month high in the SW after sunset, still at its maximum magnitude of -4.3. But thereafter the brilliant planet moves rapidly toward the sun, setting earlier and earlier and finally disappearing into the solar glare by the end of the month.

The gap between Mars and Venus widens as the latter planet moves westward. Mars, much fainter than Venus, remains high in the SW, setting 3 hours after the sun in midmonth and a half hour after Venus. The red planet moves from Pisces into Aries.

Saturn, in Libra, rises in the SE around midnight on March 1 and by the end of the month, at 10 PM. The ringed planet appears to reverse direction on the 7th, turning westward for several months—an illusion caused by the earth catching up to the distant world and eventually passing it.

Bright Planets (Morning Sky):

Jupiter, in Capricornus, is still low in the SE before sunrise but slowly brightening. It rises at 4 AM in midmonth, 2 hours before the sun comes up.

Saturn moves low across the southern sky and stands in the SW at sunrise.

Moon Phases:

Full moon--March 6
Last quarter--March 13
New moon--March 21
First quarter--March 29

The Stars:

During the midevening hours the bright stars of the Winter Circle are sliding into the west. The brightest nocturnal star, Sirius, appears in the SW. The springtime constellations are at last ascending the eastern heavens—Leo the Lion, Bootes the Herdsman, and Virgo the Maiden. The orange star Arcturus (in Bootes) is another of those objects that often cause false UFO reports when they are low in the sky (refraction effects). In midmonth this zero-magnitude luminary, fourth brightest nighttime star, rises in the NE about 7:30 PM.

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