Mind Uploading –

A process of

super-preservation

1. I thank Prof. Angel Marchev and Angel Marchev (son) on behalf of our association "SSA -2012" for the organization of this transhumanist forum and the opportunity to take part in it. In Bulgaria such forums are a rare thing!

2. Today's presentation is dedicated to our main goal - mind uploading - theory, technology, philosophy.

   Of course,

   only a certain aspect - the awareness of mind uploading as a process of super-preservation (or over-preservation) that matters not only to man as an individual and society,

   but also to the whole Universe.

1."The popular term "mind uploading" (sometimes called "mind copying" or "mind transfer") is the hypothetical process of copying mental content (including long-term memory and "self") from a particular brain substrate to a computational device, such as a digital, analog, quantum-based or artificial neural network."

The quote is from the site: **https://carboncopies.org/**

2.A similar definition can be seen here:

https://en.wikipedia.org/wiki/Mind_uploading

"Whole brain emulation (**WBE**), **mind upload** or **brain upload** (sometimes called "**mind copying**" or "**mind transfer**") is the hypothetical futuristic process of scanning the mental state (including long-term memory and "self") of a particular brain substrate and copying it to a computer. The computer could then run a simulation model of the brain's information processing, such that it responds in essentially the same way as the original brain (i.e., indistinguishable from the brain for all relevant purposes) and experiences having a conscious mind.[1][2][3] "

3.As noted ,"Mind uploading" has

very different meanings in the conversations of different communities….

but firmly connected with achieving personal immortality through cybernetics technology!

4.Mind uploading is closely related to the idea of achieving immortality in man… or more precisely with the cybernetics variant of personal immortality / A. Clark, V. Glushkov ... /

1.Our understanding is set out in sufficient detail for the first time in the article:

Can we put a new meaning into the idea of personal immortality!?

(This article has been published for the first time in "Man Evolution Cosmos" Volume 1 / 1983)

It can be expressed as:

   "The personal immortality of man becomes feasible as a process of unlimited existence and development of

 the system of information,

identifying itself with consciousness, self-consciousness, personality, in a series of

corporeal-material carriers with ever growing possibilities."

Our understanding is based on the notion that personality, the psyche with qualities of consciousness and awareness is a system of information that exists in the memory space of the human brain! (Exists as a hyperstructure!)

This idea is not just an quirk, it is based on many years of own research that is based on the work of
P.K. Anokhin, L.M.Veker, D.I. Dubrovskii, V.I.Kremyanski, S.Petrov and etc.
<u>I will emphasize:</u> **A system of information that identifies itself with the psyche and has the qualities of consciousness and self-consciousness is neither memory nor the memory space, nor the memory-carrier-the nerve network. This system is a dynamic, dissipative structure that arises from the sensory flow of information and the available memory. Unique and unrepeatable entity for everyone!**
As can be seen from the slide drawings on slide №5:
1. Mind uploading from the donor organism to the receiving organism is understood as **migration, resettlement, transfer** ... rather than as simulation or emulation in the sense of reproduction.
2. The system of information that identifies itself with the psyche, consciousness and self-awareness is too complex, unique and with a specific dynamic ... so that it can be reproduced.
3. But a specific path could be made to relocate it to a new bearer / brain.

4. Once this specific path has been interrupted ... the system of information will continue to evolve and develop into the memory space provided by the new carrier (brain).
5. The process can be carried out many times and to realize unlimited existence and development of the system of information in a series of fixtures vehicles with continuity and growing perfection.

SlaidN:6

Д.И.Дубровский,"Информация, сознание, мозг" М.: «Высшая школа», 1980 this is the monograph in which a detailed analysis of the deficiencies of physical materialism has been made.

The thesis is clear - why it can not serve as a basis for a solution to the Mind-Body problem!?

Physical materialism handled only with the term "structure" there's no "hiperstruktura", "information", "systems of information"…

In the case on the left - there is one system - a brain ...

in the case on the right **there are two ontologically different systems:**
a brain-carrier and a system of information such as hyperstructure in the brain.

We also use materialism as a philosophical foundation of the process, but materialism + dialectics + general theory of systems! A significantly richer philosophical methodology!

Slide 7 shows the most significant difference –
the difference in technology!
Proposed Uploading Procedures:

1.The Microtome Procedure

2.The Nanoreplacement Procedure

3.The Moravec Procedure

4.Nondestructive Uploading Procedures

Our Uploading procedure:
ARTIFICIAL COMMISSURE
(INVASIVE,
NON-INVASIVE)

Artificial commissure is designed like the biggest natural commissure in the brain - Corpus callozum!

This allows commissure of the two hemispheres of the brain to work as a unit and have a common mentality.

"Additionally, we assume that the neural states are computational processes and devices capable of universal computing are sufficient to generate the same kind of computational processes found in a brain."

No ... in principle yes, but in practice ineffective and impossible!

Collective calculations are inherent to neural networks, but only in the development of the theory of spin-glass in solid state physics became clear difference in efficacy and confirmed the prophecy of *John von Neumann.*
 Hopfield J.J., Proc.Nat.Acad.Sci,1982,vol.79.,2554.- revives interest in real neural networks.

Importance:

   Modern technology dramatically affecting human existence - achieving practical immortality of consciousness!

Our understanding of Importance:
   A huge leap in people's development that not only achieves the immortality of consciousness, but transforms mankind into a cosmic factor for changing the Universe!
Why!?

Slide 10:
Our approach makes a clear
positive feedback
between
 a system of information and a carrier system!
Schemes of left and right depicts the same thing!

Slide11:
For the first time such positive feedback has arisen with the advent of the first system of information on Earth - the genetic system of information.

Slide12:
The principle of evolutionary acceleration – A.I. Oparin, J.D. Bernal, *Carl E. Sagan …*
Richard Dawkins**The Selfish Gene** , 1976.
How is it achieved ?!
By replicating DNA - rewriting the genetic information of a new molecule!
The curves shown illustrate the principle of evolutionary acceleration!

Slide 13:

Mind uploading wants to do the same for a more important system for us
- psyche, consciousness, self-awareness!
 The analogy is obvious ... but there is a significant difference:
 in mind uploading
positive feedback becomes unlimited ..!

Slide 14: Directly on the Slide!
Everything is based on the three philosophical principles:

The world is infinitely diverse!

The world is knowledgeable!

The human consciousness (as a person and society) achieves the truth!
(MIND is able to achieve TRUTH !) - Can realize extreme BEHAVIOR, AND OPTIMAL MANAGEMENT!

Slaid N15:
The realization of a mind uploading process is triggering a burst in system formation, which is constantly expanding and unlimited.
This system blast develops in the following directions:

1. It encompasses and integrates into a whole ever smaller and increasingly larger spatial scales! It penetrates and organizes the microcosm, the macros and the mega-world!

2. It binds into a unified whole of time processes that are extremely short and also processes that are infinitely long.

3. It covers all the qualitative variety of phenomena and subordinates them in an engineering way.

4. This process of system formation is also a space-time transducer which, with its expansion, acquires the dimensions of the existing universe.

Where is the link to the preservation !?
It is in the very understanding of a system!
Our primary definition of system is that of PK. Anokhin:

SlaidN16:

"A system could be called such a complex of selected components between which the interaction and the interrelation are becoming mutual COoperation between the components for the obtaining of focused beneficial result " (P.K.Anochin)

Let's look at it a bit in detail!

"A system

could be called such

a complex of selected components

among which

 the **interaction and the interrelation**

are becoming

mutual Cooperation

 to produce

 a focused beneficial result "

It is interesting to trace how PK Anohin comes to this definition !?

1. Analysis of the problem of complexity! It is irreplaceable when it comes to the central nervous system and the mental one!
2. The question arises who introduced the order into the chaos of interactions ?!
3. The answer is: the necessary result, which is related to the inclusion of the system in the metasystem.
4. The spectrum of different results does not imply their equal significance - one of the most important results stands out with one of great importance - survival, self-preservation - it defines and subordinates all others!

**Here we come to the main thing –
self-preservation!**

Slide 19:

Cybernetics reveals a specific type of resistance to material formations, which was called:

    self-preservation!

SlaidN20:

The forms and manifestations of the preservation are different and until now no unity has been found between them.

With the positive feedback revealed, it is possible to make a retrospective rethinking of the relationship between the forms of preservation. The ability of self-preservation to dominate and subordinate all other forms of preservation through the process of mining upladding means the universality of self-preservation. Draw all forms of preservation from it!

This means that the general theory of systems can be built and can be interpreted as

a general theory of preservation!

 Final: Georg Klaus

"... there is a universal struggle between the systems. In this struggle, unsustainable systems are destroyed,

only remain sustainable and they give the world what is."