The use of artificial intelligence's elements to block the manifestations of individuals' behavioral activity going beyond the quasi-stable states

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The use of artificial intelligence`s elements to block the manifestations of individuals` behavioral activity going beyond the quasi-stable states

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Abstract. The monitoring of the metastable states of individuals as a bifurcation point of development of intellectual dynamics of behavioural activity allows us to identify a set of characteristics of coherent-resonant clusters of manifestations of biophysical factors and information-cognitive nature. Conscious changes in the functioning modes of brain and human nervous system can be achieved by electromagnetic influence or purely informational influence as well as by the combined effect of both these factors. The arrangement of complex processes of informational influence is required to penetrate to the level of conscious (semantic) and unconscious (mental, emotional, meditative) interpretation of events when it is necessary to ensure sufficiently stable cognitive-behavioural stereotypes of individuals and their groups. Convergent informational and electromagnetic effects facilitate the effect on the brain, including the use of neuro-linguistic programming for this element with correction or even a complete change of the reflexive matrix (matrix of key reflexive reactions) with a corresponding change and fixation of the personality-style in the personality events to block the release of behavioural activity of individuals beyond quasi-stable states.

1. Introduction

It is necessary to forecast the appearance of behavioural manifestations beyond quasi-resistant states as a source of increased risks of emergency situations. The use of factors of biophysical and informational-cognitive character creates opportunities for blocking the output of manifestations of behavioural activity of individuals beyond the limits of quasi-stable states, pushing the personality to active destructive actions. The assessment of the probability of critical intellectual dynamics in behavioural activity can be realized based on an analysis of the dynamics of the functional interrelationships of the psycho-semantic subjectivity of a person and various political, economic, social and other factors based on a multiparametric analysis of diverse data.

2. Highlighting of a set of characteristics of coherent resonance clusters of manifestations of biophysical and informational-cognitive factors

In fact, the behavioural activity of individuals and their groups is enlarged by a combination of a group of factors:

- biophysical factors that form the modes of the brain and the human nervous system;
- psycho-semantic characteristics of a person, determining the activity and forms of realization of the interests (basic attitudes) of a person in relation to external irritants;
- imprinted reflexive matrices - matrices of key reflexive reactions of a conscious and unconscious nature, determining the interpretation of events (incoming information);
- informational irritants - information coming from the external in relation to the individual, the environment in conjunction with the communicative characteristics of the channels of receipt of information [1].

Authors suppose monitoring of metastable states of personalities as a bifurcation point of development of the intellectual dynamics of behavioural activity and the resulting higher level processes (politics, economics, etc.) that are crucial for the state and society in identifying the multiparameter structure behavioural activity, allows to select a set of characteristics of coherence-resonant clusters of manifestations of biophysical and information-cognitive factors as part of a certain The ongoing activity of the supersystem "the bioelectrical activity of the brain - the psycho-semantic subjectivity of the personality - imprinted reflexive matrices - informational irritants".

The study of the properties of these associations (clusters) of manifestations of biophysical and informational-cognitive factors, which form the conditions for successful-perceived and unconscious influences of an individual, makes it possible to predict the appearance of behavioral manifestations beyond quasi-stable states as a source of increased parties of external forces or groups of intrasystem actors.

3. Evaluation of the state of intellectual dynamics of behavioral activity and the probability of its going beyond the limits of critical conditions

Especially important is the prediction and proactive exclusion (initiated failure) of the possibility of resonance of these factors based on technologies of distant influence, psycho-correction and psycho-sensing, taking into account the psychosemantic personal qualities of an extended nature (official and real political orientation, quality of its professional training, cultural level, interests, volitional qualities, internal motivation, etc.).

It is necessary to divide the transitional activity of the supersystem “brain bioelectrical activity — psychosemantic personality subjectivity — imprinted reflexive matrices — informational stimuli” so that each aggregated segment (personality group) of an ordered interconnection of functioning and interaction of distributed information objects, information networks and information consumers (work, leisure, personal life, participation in public or political activities, collective networks s communications, intellectual leisure, create, honours, etc..) was presented as a kind of one macro-object.

This macro-object includes many evolving subsystems, each of which corresponds to a local state of short-term relative equilibrium of the super-system, which can be characterized by a consolidating “convolution” of manifestations of biophysical and information-cognitive factors into cluster-forming structures.

To forecast a possible emergency situation due to peak behavioral activity of large groups of the population, it is necessary to form a package of monitoring models, including It is necessary to assess the state of intellectual dynamics of behavioral activity and the probability of its going beyond the limits of critical conditions as a source of increased risks of emergency situations. Estimation of the probability of the critical intellectual dynamics of behavioral activity can be realized on the basis of an analysis of the dynamics of the functional interrelationships of the psycho-semantic subjectivity of an individual and various political, economic, social and other factors based on a multi-parametric analysis of heterogeneous data obtained as part of constant monitoring. dynamically changing situation.

The complexity or impossibility of using a physical (or other substantive) or statistical approach in assessing the criterion indicators of aggregates of a possible database of the processes in question is most pronounced in relation to hard-to-form objects (psycho-semantic subjectivity of an individual), as well as in complex multifactor relationships of the assessed characteristics, in particular, indicators of the expected adequacy of the model of a complex system constructed using standard mathematical

models and algorithms chesky units. Neural network modelling using information obtained during the analysis of [information and telecommunications] events that may be related to a particular person allows predicting the intellectual dynamics of behavioural activity, incl. allows you to get a summary of the summary information about the object (person), which is not explicitly available in information sources by analysing large arrays of complex structured data. This data can be obtained when monitoring the Internet and the dynamics of various telecommunication services (the dynamics of using channels and television programs, the dynamics of mobile message traffic in conjunction with current political processes, query keywords when searching the Internet, atypical activity of social networks communication etc.), as well as the dynamics of electromagnetic fields of natural and man-made origin in relation to the territorial mobility of a particular person.

4. Programming cognitive-behavioral stereotypes as a basis for event-based chains of personal actions

Identification of the psycho-semantic qualities of an individual based on an analysis of their interests and preferences regarding the viewing of information programs, activity in social networks, the choice of computer games, etc. as a set of electronic content data, it allows to form a cognitive-reflexive model adapted to a specific personality with embedded elements of neuro-linguistic programming for identifying and interpreting what is happening, serving as a source of actions of this personality within the framework of world-view clusters that are virtually and organizationally organized for this case. and professional patterns of interpretation of the surrounding reality. That is, to ensure the identification of qualities and personality programming.

Management of the considered information-cognitive processes necessitates the development of new approaches to the development of information systems based on the convergence of the process of perception of information stimuli. In these approaches, the manipulative concentration of the attention of the individual and the interpretation of information should be “combined” into a single composition for operating with semantic structures, translating the semantic transcription from the conscious to the unconscious level using neuromodulation — the vector stimulating activity of various subsystems of the brain and nervous systems through convergent information and communication and electromagnetic effects.

There is a problem of “input” and “output” of data from a specific (identified in the framework of monitoring electronic content) identity, which can be implemented using a software neural interface used in any intelligent electronic communicative devices.

Such an interface creates a basis for programming cognitive-behavioral stereotypes as a basis for event chains of personal actions for proper functioning of social control systems in difficult conditions with a large component of uncertainty in order to eliminate the possibility of interception of control of social elements from external forces or groups of intrasystem actors [2].

The arrangement of complex processes of informational impact is required for penetration to the level of conscious (semantic) and unconscious (mental, emotional, meditative) interpretation of events when it is necessary to ensure sufficiently stable cognitive-behavioral stereotypes in individuals and their groups.

It is required that the incoming information supplant one of the future event-based nets (actions) of a specific person in the network of causal relationships between interpreted event chains. This approach is implemented in the framework of the configuration of interactive communication processes used for the exchange of information between people with the establishment of feedback and taking corrective measures based on neuro-information systems and services for various purposes.

5. Using neuromodulation to obtain the desired cognitive effect

Selecting the parameters of neuromodulation individually for an individual, one can cause inhibition or activation of brain structures, thereby achieving the same cognitive effect. Especially high efficiency of neuromodulation manifests itself with electromagnetic effects on the brain and the human nervous system [3].

As an example: in order to relieve a patient from hand-shake in Parkinson's disease, high-frequency impulses (100 Hz and more) are used for stimulation, and in order to ease the severity of phantom limb pain - low-frequency pulses (25-–30 Hz) .

The use of elements of artificial intelligence allows for dynamic adjustment of neuromodulation based on monitoring the electrical activity of the brain of a particular person [4, 5]. When electrophysiological signs appear, manifestations of aggression as a reaction to the person receiving an identifiable information package containing information about the surrounding reality, a stimulator of electromagnetic effects (for example, built-in an electronic communication gadget: computer, smartphone, smart TV, etc.) starts automatically and immediately sends stimulating electromagnetic impulses that suppress a sharply negative reaction, pushing the person to active destructive effects.

When adjusting the electromagnetic effect to the activity of the key points of the brain, similar effects can be achieved by remote influence, for example, from a cell phone, with a less pronounced effect on segments of the nervous system - - from an intellectual medical bracelet, intellectual paired wristwatches, etc. At the same time, a point dynamic electromagnetic or laser effect on individual biologically active points of the nervous system (for example, being on the wrist) can also quite effectively suppress the psychological irritation of the personality, switching its active attention from the interpretative (conscious, semantic) reaction to the information received - on the physiological (unconscious, reflexive) reaction to changes in the activity of a specific nerve point (nerve ending) [6].

6. Results

Conscious change in the modes of functioning of the brain and the human nervous system can be achieved by electromagnetic action or by purely informative influence as well as by the combined influence of both these factors. An informational impact is the receipt of an information package that causes the brain to temporarily “crash” by analogy with a computer.

At the same time, the brain enters a trance state in which it is exposed to an increased uncontrolled perception of information received from outside (analog: “Gypsy hypnosis”), which forms a specific vector of personal activities of the person, realized in the near or distant period [7].

That is, convergent informational and electromagnetic effects facilitate the impact on the brain, including the use of neuro-linguistic programming for this element, with correction or even a complete change of the reflexive matrix (matrix of key reflexive reactions) with a corresponding change and fixation events.

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