International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 23 (2015) pp 43514-43516

Investigated essence in the infografichesky theory multipoint the logician (part 1)

Volkov Andrey Anatolievich

DSc, prof., Rector of MSUCE Russia, National Research University "Moscow State University of Civil Engineering", 26 Yaroslavskoye shosse, Moscow, Russian Federation,129337 volkov@mgsu.ru

Chulkov Vitaliy Olegovich

DSc, prof, National Research University "Moscow State University of Civil Engineering", 26 Yaroslavskoye shosse, Moscow, Russian Federation, 129337 vitolch@gmail.com

Chulkov Georgy Olegovich

DSc, prof., LLC Research and design center "City development", Prospekt Mira, D. 19, 3, Moscow, Russian Federation, 129090 g.chulcov@mail.ru

Rahmonov Emomali,

PhD National Research University "Moscow State University of Civil Engineering" 26 Yaroslavskoye shosse, Moscow, Russian Federation, 129337 emomali75@mail.ru

Abstract
The purpose of development of the infografichesky theory multipoint the logician is studying of the frames (an empty framework) of the organized components presented in the form, their relations and results of these relations. Construction and use of models multipoint the logician allows is realized to carry out the operating influences, in advance to plan the expected results of these influences and in due time to react to the actual deviations from the planned results.

Keywords: Infografiya, the theory multipoint the logician, investigated essence, components, ratios, results, a soorganization of ratios and their resultscompendency, invariance and divisibility in the management chain; traditional, mechanised, automated and automatic systems.

In a number of publications [1-6] local fragments of the infografichesky theory multipoint the logician, offered by Chulkov V.O. and Chulkov G.O. (1969) at the Moscow aviation institute of Sergo Ordzhonikidze and developed by Chulkov V.O. and Masturov I.Ya. (2001-2005) at the Central research institute of the organization, mechanization and technical assistance to construction.
We will consider the purpose, basic structure and investigated essence of the infografichesky theory multipoint the logician.
The integrated structure of the infografichesky theory multipoint the logician (figure 1) adumbrates about a variety of components ***COM***, relations about ***REL*** and results ***RES*** of these relations. As required all structural elements can be subjected to further decomposition.
The inductive reason that any theoretical proof has to be guided by some statements is widely known. If for each of these statements, in turn, to demand new proofs, we will receive an infinite chain. Theorists use known reception long ago: it is necessary to break off this chain in some place, to accept some statements for initial, not demanding any proofs. Such initial statements call ***axioms*** (from Ancient Greek *ἀξίωμα* - the statement, the provision) or ***postulates***.
Therefore it is necessary to give a number of fundamental approvals of the infografichesky theory multipoint the logician.
Statement 1. The purpose of development of the infografichesky theory multipoint logician ***ITML*** is studying of the frames presented in the form ("an empty framework" according to Marvin Lee Minsky, 1954, 1967, 1985) components ***COM***, their relations about ***REL*** and results ***RES*** of these relations: ***ITML*** = □ ***COM*** $_{IJ}$, ***REL*** $_{IJ}$, ***RES*** $_{IJ}$ □.
Statement 2. Structural components of the infografichesky theory multipoint the logician, ***ITML*** it is possible to investigate in a statics (as ***subjects***) or in dynamics (as ***processes***). The subject during supervision over it doesn't change the current values of the parameters. Process changes the current values at least of one parameter during supervision.
Statement 3. Research of structural elements in the infografichesky theory multipoint the logician, ***ITML*** (fig.1) carry out after a preliminary choice of one of approaches corresponding to complexity of the studied ITML component and possibility (expediency) of its further structurization in the course of research. The first among such approaches is ***monadny***. He assumes detection of the local closed final set of logical points (sushchnost) as the closed system (object of research) which isn't subject to further specification (to identification of smaller objects of research in the closed system) in the course of research.

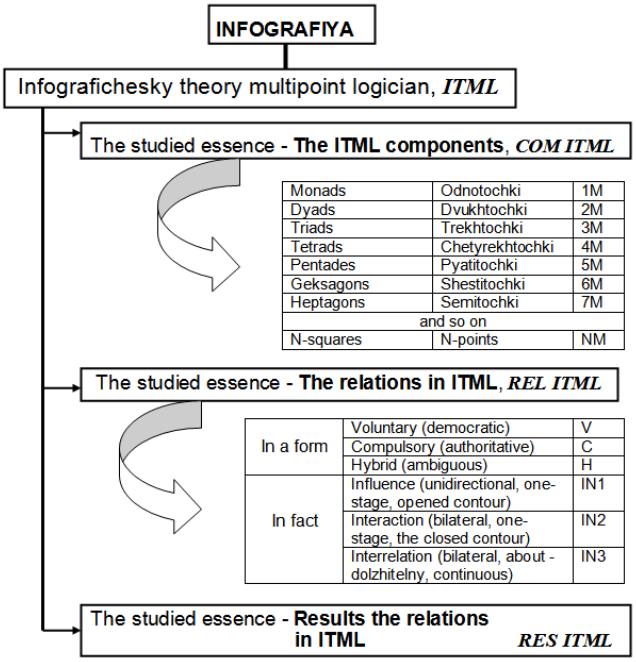

Fig.1. The integrated structure of the infograficheskiy theory multipoint logician

Statement 4. Also ***dyade*** and ***triad*** approaches are known. The last is now the most actual, but with great difficulty enters mass consciousness. Diadny approach is cultivated more than three hundred years, everywhere use, it is a basis of known technology of management "the person in a face". Therefore the person has to make over himself big effort, reconstructing the consciousness according to the scheme "from simple to the difficult".

Statement 5. The voluntary relation ***V*** influences of ***IN1*** we will agree to designate ***VIN1*** and to call an ***exchange*** (transportation) in the "information-energy process of activity, ***IEPA***".

Statement 6. The compulsory relation ***C*** influences of ***IN2*** or interaction of ***IN3*** we will agree to designate according to ***CIN2*** and ***CIN3*** and to call loading (coercion) in the "information-energy process of activity, ***IEPA***". In this aspect in the infograficheskiy theory multipoint the logician, ***ITML*** arises the term and activity "protection against loading" (in particular - "information security").

Statement 6. The compulsory relation ***C*** influences of ***IN2*** or interaction of ***IN3*** (figure 1) we will agree to designate according to ***CIN2*** and ***CIN3*** and to call ***loading***, ***N*** (coercion) in the information-energy process of activity, ***IEPA***. In this aspect in the infograficheskiy theory multipoint the logician, ***ITML*** arises the term and activity "***protection against loading***, ***PAL***" (in particular - "information security").

The operating component ***CIN2*** can carry out the loading influence of the ***N*** for coinciding with the purposes of the loaded (operated) component and then this ***management for the purpose of adjustment or an intensification***, ***MAI*** of process of realization of the local purpose of the loaded (operated) component or system in general.

The loading (operating) component ***CIN2*** can be a component of another, alien loaded to elements, systems. In this case the ***N*** is an element of destruction of process of realization of the local purpose of the loaded (operated) component or system in general (***terrorist influence***). After detection and recognition of terrorist nature of such influence it is necessary to carry out immediately ***PAL***.

Statement 7. Models of the relations about between components ***COM*** and results of such relations P for different zones (circles) of removal of such results from components ***COM*** of model in process of increase in number ***COM*** in infograficheskiy model (a monad, a dyad, a triad and so on) can significantly become complicated. Infograficheskiy models of a monad ***1M*** and dyads ***2M*** (figure 1) allow to visualize and understand all model entirely on one image.

Statement 8. The model of a triad ***3M*** is significantly more difficult than models of a monad ***1M*** and dyads ***2M***. Therefore, as it will be shown below, its complex model on one image turns out difficult distinguished and is perceived as a certain ornament. To provide high-quality and intelligible recognition of all aspects of infograficheskiy model of a triad ***3M*** it is necessary to fragment it on several local models, each of which shows possibilities of a triad ***3M*** separately at influences of ***IN1*** (including when loadings ***N***) and at interactions of ***IN2*** and ***IN3***.

Statement 9. The alphabet of images of infograficheskiy model at the monadny level ***1M*** is simple (fig.2a): actually monad ***1M*** and influence of ***IN2***. But this couple allows to receive a number of more complex compositions ("graphemes", see fig. 2b, 2c, 2D, 2e, 2f b, etc.).

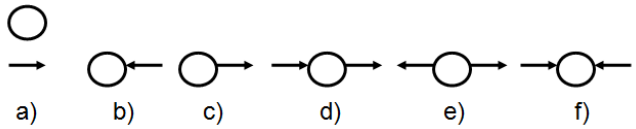

Fig. 2. Variety of options of models of a monad [7, page 22]: a) alphabet of images of monadny modeling (actually monad and influence); b) addressless influence on monad; c) addressless influence of a monad; d) monad - "translator"; e) "source"; f) "drain"; (e and f - V.P.Salnikov's terms [7]).

The person can trouble not especially himself thoughts of what consequences of the influences made by it will be. He, as a rule, doesn't feel responsibility not only for remote, but also for direct consequences of the affairs, and sometimes - even defies it. Therefore impacts on figure 2 are directed "it isn't known to whom" or are received "it isn't known from whom" that is in real life is inadmissible high and dangerous (from the point of view of need of protection against terrorist influence) abstraction level.

The sane person, even without knowing precisely who actually can be the addressee of his influence, always assumes (predicts, represents, conjectures) an image and characteristics of the addressee of the influence. Otherwise reliability of estimated result it will be insignificant it is small.

Therefore the model of a monad (fig.3) displaying the alleged addressee of COM_2, its alleged response to initial influence of

IN1₁ (result of influence, ***RI₁***), its reciprocal impact of ***IN1₂*** on the author of ***COM₁*** of initial influence and, at last, total reaction of ***RI₂*** of the author of initial impact on process of communication with the hypothetical addressee is more actual. We will call set of results of influences of ***RI₁*** and ***RI₂*** the ***first circle of results of influences***, ***FCRI***.

In process of practical expediency it is possible to consider circles of results of influences of the second, third and higher levels.

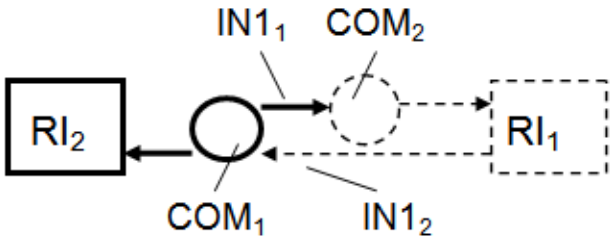

Fig. 3. Infograficheskiy model of a monad.

By the continuous thick line it is shown really the existing part of a chain of influence, a dashed line - hypothetical.

Scientific work is realize under support of Ministry education and science Russian Federation (grant of President Russian Federation №14.Z57.14.6545-SS).

References

[1] Infografiya of functional systems / V.O.Chulkov, V.I.Rakov. - Chapter III. - Page 55-82 // In book: Information models of functional systems / Under a general edition of K.V.Sudakov and A.A.Gusakov.- M.:Fond "The new millennium", 2004.- 305p., ill.

[2] Infografiya of a construction reorganization / V.O.Chulkov, A.E.Shegol, G.O.Chulkov// In book: Construction bulletin of the Russian Engineering Academy: Works of the section "Construction" of the Russian Engineering Academy. - Release 6. - M.: Publishing house of the Russian Engineering Academy, 2005.- p.34-35.

[3] Composite infograficheskiy modeling of organizational and technological reliability of a construction reorganization / V.O.Chulkov, P.D.Buryanov, I.R.Badukshanov, V.V.Shmakov, A.V.Kozyakov // Industrial and civil engineering.- 2005.- №10.- p.30-31.

[4] INFOGRAFIYa. Volume 2: Infograficheskiy modeling of nonlinear virtual functional systems of a so-organization of activity. The "Infograficheskiy Bases of Functional Systems" series (IOFS) / Under the editorship of V.O.Chulkov.- M.: SVR-ARGUS, 2007.- 264p., ill.

[5] Sudakov K.V., Chulcov V.O., Kazaryan R.R., Glazachev O.S., Dmitrieva N.V., Komarov N.M. Antropotechnics: Norm in every living thing and artificial beings / Edited by professor V.O.Chulcov.- M.: SvR-ARGUS, 2013.- 320s, ill.

[6] Components and guidance for constructional rearrangement of buildings and structures within reorganization cycles / A.A.Volkov, V.O.Chulcov, R.R.Kazaryan, V.A.Fachratov, O.N. Kyzina, R.K.Gazaryan /Applied Mechanics and Materials Vols. 580-583 (2014) pp 2281-2284, Online available since 2014/Jul/04 at www.scientific.net, © (2014) Trans Tech Publications, Switzerland, doi: 10.4028/www.scientific.net/ AMM.580-583.2281.

[7] Informatics and mathematics: An album of schemes / Under V.P.Salnikov's edition. - SPb.: Ministry of Internal Affairs St. Petersburg university of Russia, 2000. - 92s.il.

[8] Volkov, A., Chulkov, V., Kazaryan, R., Sinenko, S. Acting adaptation and human parity in the triad "man - Knowledge - Methods" (2014) Applied Mechanics and Materials, 584-586, pp. 2681-2684.

[9] Belostotskiy, A.M., Dubinsky, S.I., Afanasyeva, I.N., Kotov, F.M., Vershinin, V.V., Scherbina, S.V., Petryashev, S.O., Petryashev, N.O. External extreme impacts on NPP constructions – Methodology of computational simulation (2014) Advanced Materials Research, 1040, pp. 472-477.