The Electronic Library of Subject Signs for Tourist and Recreative Maps of Pribaïkal'e

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SUMMARY

The electronic library of convectional signs for recreative and tourist maps collection of graphics, semantic, metric components expressing a content of maps recreativ and tourist are of particular significance. In a technical electronic library of convectional signs publications name as the digital classifier of an electronic map. The electronic library of convectional signs has a similar construction with a legend of a customary paper map, the difference is encompass byed by composite classified and outline.

Before to elaborate electronic library of convectional signs of recreative and tourist maps, it is necessary to unify a contents and to compound mockups of legends on the initial cartographical materials. As electronic of maps recreativ and tourist mirror as topographical, and subject contents, in a basis topographical of units the methodological principles and system approach included in development of scientific bases of a contents of topographical maps [Vereshchaka, 2002] are put.

Electronic of maps recreativ and tourist is, first of all, subject maps. Therefore first of all, the subject groups of legends of the recreativ and tourist schedule will be considered. Their amount depends on district of mapping, his natural features and development of a socio economic orb. The classification of recreativ and tourist resources (cognitive concept) was earlier represented, which one is put in unification of a contents of such maps. Besides, it should be allowed the semantic principles (language concept) and modern geographical information technologies (geographical information concept) build-up of legends and application them as the shell for handle. The combination of the several concepts reduces in usage of the structural approach [Lebedev, 2003].

The contents of recreative and tourist maps has a logical sequence of allocation signs on sense, and is grouped together in subject sections, that enables to spot the philosophy of unification, thereby to form the system of legends.
The unified contents allows to understand a map, its system links between objects, to distinguish main and minor, to spot methods and receptions of cartographical interpretation of objects of a reality. This implies that than more correctly and more in detail to fulfil unification, the easier is to realize technological aspects of creation of maps.
In a basis of unification the semantic value of objects of a map is taken, which one concludes system principles of structural information organization.

The electronic maps in vector representation have possibility to show, except for the metric description of objects, their semantic properties (Fig. 1). On definition, as semantic properties name the individual characteristics of objects, their quality and

quantitative parameters. The cartographical signs of design and denotations permitting visually to read a map have no semantic properties.

Outgoing from the above reduced table, it is possible to suppose about availability of types of a field (characters, whole, decimal) and text files (is attached to an electronic map).
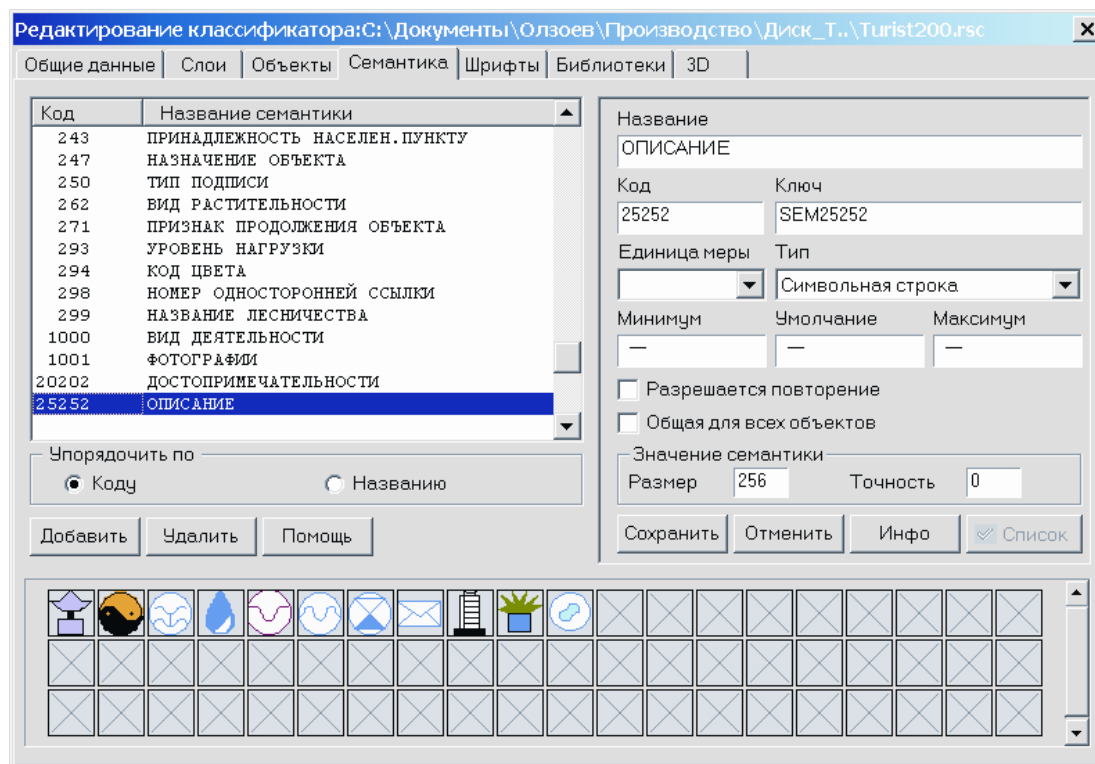
Fig. 1: Sections "Semantics" in the classifier of an electronic map

The development of the electronic library of convectional signs is one of ports of reference of creation of any map and is considered on a design stage. Therefore first of all there was a necessity to be spotted with technological principles of graphics build–up of cartographical signs and their semantic value on electronic maps recreativ and tourist.

At development of the classifier of convectional signs or electronic library of signs allow following items:

– Shared data (scale, graphic palette, electronic map type);

– Unified contents of the future map, distributed on subject groups (stratums of an electronic map);

– Objects of an electronic map – topographic and subject signs, description of their build-up with usage of structural members (point, line, polygon);

– Semantic properties of electronic map objects;

– Used fonts, description of their trajectory;

– Libraries permitting to optimize build–up of cartographical signs;

– 3D visualization of electronic map objects.

The graphics variables (form, sizes, inner pattern, colour, alignment of the sign), designed in 1960 are put at the bottom (basis) of cartographical signs designing by the French cartographer and semiologist J. Berten [Lyuty, 1988].

At computer build–up of cartographical signs the specialized cartographical complexes (hybrid module a Panorama, hybrid module MapInfo, hybrid module ArcView etc.), system of automatic design (AutoDesk, Credo etc.) and graphics editors (CorelDraw, Adobe Photoshop, QuarkExpresse etc.) will be utillized. Allowing a diversity of present programs, the choice was made on a hybrid module a Panorama, since she allows creating cartographical signs of different frame consisting of set of structural members (a point, line, polygon).

The electronic maps recreativ and tourist concern to the service charts and public health services, which one are directed on support by the information of customers on development of tourist activity, recreational significance and ecological state of territory. As the contents of maps recreativ and tourist consists from topographical and subject cartographical signs, and topographical signs are shaped of the reference digital classifier of an electronic map for topographical maps of scales 1:100 000 and 1:200 000, the major attention will be referred to development of subject cartographical signs.

In theory of cartography on space localization there are three types of cartographical signs (dot, linear, area), and also subscript (explanatory comment, own titles, subscript of the characteristics). As the creation of cartographical signs is designed in a hybrid module a Panorama, here in the program and accordingly in the digital classifier of an electronic map, two types are added: vector and templates.

The type of localization Vector is understood as conditionally – linear, having particular distance or conditionally – dot – for an alining on a direction (circle). Metric type Vector consists of two clusters: the first site indicates location, second site – direction (alignment of the sign).

The type Templates is applied at composite frame of varied signs, for example, combination of the text and ponctuel of the sign. The text can be composite, multilevel, the usually given type will be utillized seldom and is not convenient at converting in graphics formats (*.jpg, *.cdr, *.tiff etc.), because the continuous editing of signs is required.

Allowing principles of development of signs of the methodological and technological sides, it is possible to compound the scheme of a relation of objects of tourism and recreativ on a contents and type of localization (ways of the cartographical map).
The development of cartographical signs surveyed in a hybrid module a Panorama at a stage of creation of the classifier of a map.

At development of cartographical signs it is important also to allow for following specifications:

– The sign should be legible, readable, since at converting them in other environment, there are problems of a picture representation;
– To utillize the least amount of structural members;
– To apply only dot, linear, area type of localization.

In the transactions A.M. Berlyant scores, that the signs are a means fixings, formalising and systematization of knowledge [Berlyant, 2001].

In judgment V.A. Vostokova etc., the development of cartographical signs of georaphical maps founds on knowledge and rational usage semiotic of aspects, on the one hand, and deep learning of an essence of displayed appearances – with other [Vostokova, etc., 2002].

Outgoing from the above-stated scientific positions, it is possible to make following output: cartographical signs and the explanations to them shape technological knowledge grounded on substantial objects and appearances and express by particular resources of a graphics. Therefore development of different cartographical signs has the relevant value at creation of any cartographical product.

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