

# Ḑañííçíáááíéá ñòàḑíñéàâyíñéèõ òáéñòíâ íàòíáàìè, íñííâáííúìè íà áéíâéâíḑèòìàõ àíàèèçà èçíá

Ááóíḑ Áéáéñáíáḑ Áàéáḑúááè- Éó-óááííá  
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Ñóúáñòáóáò ìííæáñòáí íàòíáíá òèḑííáíé íáḑááíḑèè èçíáḑàæáíéé (ñì. íàíḑèíáḑ, íáçíḑíúá ḑááíòú [Áííñàéáñ è äḑ. 2006; Øàíèḑí è áèíèíáè-áñéèò ñèñòáì è ñâyçáííúõ íáúáé íàḑááéáííé ḑáéóḑñéáííáí àíàèèçà íḑíñòḑáíñòááííúõ íòííḑáíéé, ÷òí ííçáíéyáò ííáúñèòú á

Íḑíóáññ áíàèèçà íḑááñòááéyáòñy á áèáá òḑáõ óḑíáíáé,  
ííáḑàòéáíí áçáèííááéñòáóòpùèḑ íáæáó ñíáíé (ḑèñ. 1).

Ḑèñ. 1.  
Ñóáíà òḑáóóḑíáíáíáí àíàèèçà èçíáḑàæáíéé

Óḑíááíú  
èíéáèúííáí áíàèèçà è ñòàòèñòèèè. Çááñú áúííéíyáòñy  
àíàèèç èó-áé, èñòíâyùèḑ èç óáíóḑáéúííáí íèèñáéy íèḑáñòííñòè 3'3 èèè 5'5  
(ḑèñ. 2), áúáíḑ íáíḑááéáíéy ñíáúáíéy íèḑáñòííñòè, áúááéáíéá íñíáúõ òí-áé è  
áḑáíéò íèíúááííúõ íáúáéòíá. Ááñú íḑíóáññ íñóúáñòáéyáòñy ñ íííúúòò ííáḑàòíḑà- áíàèèçàòíḑà  
èíéáèúíúõ íáèàñòáé. Á ḑááíòá [Éó-óááííá 2006] íḑèááááíá ááí íáéḑíñàòááây



òḍàáíáíòàḍííáí áíàèèçà è éíàèḍíáàíèý. Ḑáçóèüòàòú  
éíèáèüííáí áíàèèçà èçíáḍàæáíèý á àèää íñíáúḡ òí-áè è òáíí-áè éííòóḍíúḡ èèè áḍáíè-íúḡ  
íèèñáèéé íñòóíàḡò á íáḍàòèáíóp çḍèòáèüíóp íàíýòú (ÍÇÍ). Íñèí íñíáííé  
òóíèḡèè &ndash; ñíḡḍáíáíèá íá íáéíòíḍíá áḍáíý éíḍíḍíàḡèè, áúḡááḡáé èç ííèý çḍáíèý,  
çááñú áúííèíýḡòñý íáḍàòèè í ñæàòèḡ íèñáíèý èçíáḍàæáíèý: àíḍíèñèíàḡèý  
éííòóḍíá è áḍáíèḡ ìḍáçèàìè ìḍýíúḡ, áóá, ñíèáéííá; òòí-íáíèá íñíáúḡ òí-áè  
(óáèíá è ḍáçááòáèáíèé); áúääéáíèá ñèáèáòíá è áḍóáèḡ òáḍàèòáḍíúḡ íñíááííñòáé.  
Çá-àñòóp ìḍè ýòíí ÍÇÍ áèòèáèḍóáò òóíèḡèè íáḍáíáí óḍíáíý, áíçáḍàùáýñú  
íáííñḍááñòááíí é áíàèèçèḍóáííè íáèàñòè èçíáḍàæáíèý, áñèè òàèáý áíçííæííñòú  
èíááòñý.

Á òíáá àíḍíèñèíàḡèè ñííáá, íí óæá íá íñíáá òáíí-áè  
òòí-íýḡòñý íñíáúá òí-èè (ḍèñ. 6) è  
ḍáèóḍñèáíí íááèḍáḡòñý íḍèíàèüíúá òí-èè íáḍááèáá &ndash; éííòú àíḍíèñèíèḍóḡḡèò ìḍáçéíá.  
Íá ḍèñ. 7 íèàçáíú ìḍèíáḍḡ ḍáçóèüòàòíá àíḍíèñèíàḡèè.

Ḑèñ. 6. Óòí-íáíèá íñíáíé òí-èè íí  
íáḍááñá-áíèḡ èñòíáýùèḡ ááòááé

Ḑèñ. 7. Áḍáíèḡú òááòíáúḡ íáèàñòáé  
(áí àíḍíèñèíàḡèè &ndash; 1752 ìḍáçèá; íñèá àíḍíèñèíàḡèè &ndash; 62 ìḍáçèá, 75 áóá).

Íḍèíòèí ííèó-áíèý ñèáèáòíá çáèèḡ-ááòñý á ḍáçáèáíèè òèáóḍú  
íá áúííèèéúá íáèàñòè á òáò íáñòáò, ááá áḍáíèḡà èíááò ìḍèòáòáèüíúé íáḍááèá. Íḍè  
ýòíí ḍáèóḍñèáíí óíáíúḡááòñý ááèè-èíá ìḡñáèááíúḡ íáèàñòáé, ò.á. óááèè-èáááòñý  
ñòáíáíú ááòáèèçàḡèè áíàèèçèḍóáííáí íáúáèòà (ḍèñ. 8).

Δῆ. 8. Δᾶεδῆεῖα ὀάεε-ᾶῖε ἦῶῖε ᾶῶᾶεῖᾶῶ

Ὀδῖαῖῦ  
 εἶῖε-ᾶῖῖῖ ᾶῖᾶεῖᾶ ἔ ᾶῖῖῖῖῖῖῖ. Ἰῶῖῖ  
 εῖᾶῖῖῖ ἦῖῖῖῖῖῖ ῖῖῖῖῖ ἕῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ (ὈἜΥ), ῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖῖῖ, ἕῖῖῖῖῖῖῖῖ ἕῖῖῖῖῖῖ ἦῖῖῖῖ ᾶῖῖῖ ῖῖῖῖῖῖῖῖ ᾶῖῖῖ ᾶῖῖῖῖῖῖῖῖῖ. Ἰῖῖῖῖῖῖῖ ἕῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖῖῖ ᾶ ᾶῖῖῖ ᾶῖῖῖ ῖῖῖῖῖῖῖῖ = (V, E), ᾶῖῖῖ ῖ  
 Ἰ ῖῖ  
 Ἰ ῖῖῖ  
 Ἰῖῖῖ; ᾶῖῖῖῖῖ ᾶῖῖῖῖ; e  
 Ἰ E Ἰῖῖῖῖῖῖ ᾶῖῖῖ, ῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖ ὈἜΥ.

Ἄ ῖῖῖῖ ῖῖῖῖ-ᾶῖῖ ᾶῖῖῖ ῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ Ἰῖῖῖῖῖῖ Ἰῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ᾶῖῖῖῖῖ, ᾶ ἕῖῖῖῖ  
 ᾶῖῖῖ ᾶῖῖῖῖῖ ῖῖῖῖῖῖ ῖῖ ᾶῖῖῖῖ. Ἰῖ ᾶ ᾶῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ-ῖῖ ῖῖῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖ ῖῖῖῖῖῖῖ-ᾶῖῖῖῖ ῖῖῖῖῖῖῖῖ ὈἜΥ, ῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ῖῖῖῖῖῖ ῖῖ  
 ἕῖῖῖῖῖ ἕῖ ὀῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ. Ἄ ῖῖῖῖῖ-ᾶῖῖ ᾶῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖ  
 ὀῖῖῖῖῖῖ ὀῖῖῖῖῖῖῖ ἕῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ἔ ᾶῖῖῖ.

Ἰᾶῖῖῖῖ ἕῖῖ-ᾶῖῖῖῖ  
 ᾶῖῖῖῖ ῖ ὀῖῖῖῖῖ ᾶ ὀῖῖ-ἕῖῖ ῖῖῖῖ ῖῖῖῖ (beam Ἰῖῖῖῖ; ἕῖῖ-)

$$GB(v_0) = (VB, EB), v_0 \hat{=} V, VB \hat{=} EB \hat{=} E,$$

ᾶ  
 ἕῖῖῖῖῖ ὀῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ῖῖῖῖῖῖ ῖῖ ἕῖῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖ  
 ῖῖῖῖ ἔ ὀῖῖῖῖῖῖ ῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ ᾶῖῖῖῖ (ῖῖῖῖ. 9).

Ἰῖ-ᾶῖῖῖῖῖ, ἕῖῖ-ᾶῖῖῖῖ ᾶῖῖῖ ῖῖῖῖῖῖῖῖ ἔ ἕῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ὀῖῖῖῖ  
 "ᾶῖῖῖῖῖ". Δᾶῖῖῖῖῖ ῖῖῖῖῖ-ᾶῖῖῖῖ ᾶ ὀῖῖ, -ὀῖ ᾶ ᾶῖῖῖῖ ὀῖῖῖῖ  
 "ᾶῖῖῖῖῖ" ῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖῖῖ ᾶῖῖῖῖῖ, ἕῖῖῖῖῖῖῖ ἕῖ ῖῖῖῖῖ ᾶῖῖῖῖῖῖ, ᾶ ὀῖ  
 ᾶῖῖῖῖῖ ἕῖῖ ᾶ ἕῖῖ-ᾶῖῖῖῖ ᾶῖῖῖῖ ῖῖῖῖ ᾶῖῖῖῖῖ ῖῖῖῖῖῖ, ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ  
 ῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ᾶ ῖῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ-ῖῖ ῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ  
 ἕῖῖ-ᾶῖῖῖῖ ᾶῖῖῖ ὀῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ὀῖῖῖῖ, -ὀῖ ῖῖῖῖῖῖῖ  
 ῖῖῖῖ ᾶῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖ ἔ ῖῖῖῖῖ ῖῖ ῖῖῖῖῖῖῖ, ῖῖ ᾶῖῖῖῖῖῖ ἕ  
 ῖῖῖῖῖῖῖ ῖῖ ἕῖῖῖῖῖ ῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖ, ᾶ ῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖ ὀῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ  
 ἕ ῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖ. ἕῖῖ-ᾶῖῖῖῖ ᾶῖῖῖ ὀῖῖῖῖῖῖῖ ἕ ὀῖῖῖῖῖῖῖ-ᾶῖῖῖῖῖ  
 ῖῖῖῖῖῖῖῖῖ, ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖ "ῖῖ ῖῖῖῖῖῖῖῖῖ". Ἰᾶῖῖῖῖῖ, ῖῖ ἕῖῖ-ᾶῖῖῖ  
 ᾶῖῖῖῖ ἕῖῖῖῖ ῖῖῖῖῖῖῖῖῖ ᾶῖῖῖῖῖῖῖῖ (ῖῖῖῖῖῖῖ) ὀῖῖῖῖῖῖ:

Ἀῖῖῖῖ (Ἰῖῖ ῖῖῖ-ἕῖῖ) Ὀῖ ἕῖῖῖῖῖ (Ἀῖῖῖῖῖ)ῖῖ(Ὀῖῖῖῖ) ῖῖ(Ἰᾶῖῖῖῖῖῖῖ).



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This paper discusses the use of algorithms simulating the mechanisms of the biological system of sight, based on a paradigm of recursive analysis of spatial relations, for the recognition of Old Church Slavonic texts. At the first level is the local analysis of image areas; at the second level, the allocation of constructive elements of objects and coding; and at the third, the logical analysis of spatial relations graphs.