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About one theorem of V. Novák

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ABOUT ONE THEOREM OF V. NOVÁK

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In the preceding article of V. NOVÁK it is possible, by a small adjustment of the proof, to substitute the theorem 2 by the following one:

**Theorem.** *A quasi-ordered set of type  $F(\omega_\alpha, \aleph_\alpha)$  is an  $\aleph_\alpha$ -universal quasi-ordered set.*

*Proof.* For  $\alpha = 0$  this assertion follows from the theorem 3 of the preceding article.

For  $\alpha > 0$  we obtain this assertion as follows<sup>1)</sup>:

To the element  $\Psi(X) = \{a_\lambda \mid \lambda < \omega_\alpha\}$  we construct a class  $\widetilde{\Psi(X)}$  as the set of all sequences, which we obtain from the sequence  $\{a_\lambda \mid \lambda < \omega_\alpha\}$  by laving the sequence  $\{a, b, a, b, \dots\}$  or the sequence  $\{b, a, b, a, \dots\}$  of type  $\omega_0$  after each element  $a_\lambda$ . Each element  $\xi \in \widetilde{\Psi(X)}$  for all  $X \in \vec{G}$  is from  $F(\omega_\alpha, M \cup N)$ . The cardinality of  $\widetilde{\Psi(X)}$  is  $2^{\aleph_\alpha}$ . For  $\Psi(X) \leq \Psi(Y)$  and  $\xi \in \widetilde{\Psi(X)}$ ,  $\eta \in \widetilde{\Psi(Y)}$  holds  $\xi \leq \eta$ . For every  $X \in \vec{G}$  there exists also a one-to-one mapping  $\varphi_X$  of the class  $X$  into the class  $\widetilde{\Psi(X)}$ . The mapping  $\varphi$  of the quasi-ordered set  $G$  into  $F(\omega_\alpha, M \cup N)$  defined in the following way:  $\varphi(x) = \varphi_X(x)$  for  $x \in X \in \vec{G}$ , is an isomorphism.

РЕЗЮМЕ

К ОДНОЙ ТЕОРЕМЕ В. НОВАКА

ЛАДИСЛАВ МИШИК (Ladislav Mišík), Братислава

В предыдущей статье теорему 2 можно заменить следующей теоремой:

**Теорема.** *Квазиупорядоченное множество типа  $F(\omega_\alpha, \aleph_\alpha)$  является  $\aleph_\alpha$ -универсальным квазиупорядоченным множеством.*

<sup>1)</sup> We use distinctions of the preceding article.