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Title: Boolean-type retractable state-finite automata without outputs

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An automaton \mathbf{A} is called a retractable automaton if, for every subautomaton \mathbf{B} of \mathbf{A} , there is at least one homomorphism of \mathbf{A} onto \mathbf{B} which leaves the elements of B fixed (such homomorphism is called a retract homomorphism of \mathbf{A} onto \mathbf{B}). We say that a retractable automaton $\mathbf{A}=(A,X,\delta)$ is Boolean-type if there exists a family $\{\lambda_B \mid \mathbf{B}$ is a subautomaton of $\mathbf{A}\}$ of retract homomorphisms λ_B of \mathbf{A} such that, for arbitrary subautomata \mathbf{B}_1 and \mathbf{B}_2 of \mathbf{A} , the condition $B_1 \subseteq B_2$ implies $\text{Ker}\lambda_{B_2} \subseteq \text{Ker}\lambda_{B_1}$. In this paper, we describe the Boolean-type retractable state-finite automata without outputs.

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