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**Comparison of basic language generating devices
(nondeterministic systems).** (English. French summary)

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The author considers simple rewriting systems, such as regular systems, semi-Thue systems, Post normal systems, Indian parallel grammars and context-dependent and context-independent L (or Lindenmayer) systems. Each such system G gives rise to a number of languages by considering the set $S(G)$ of sentential forms (“the pure language”), the result of intersecting $S(G)$ with Σ^* for some alphabet Σ , the set $h(S(G))$ (where h is either a homomorphism, a nonerasing homomorphism, a coding or a weak coding), the adult language or the set of stable words, and the set of “dead” words. Other variations include a single initial word versus a finite set, nonerasing rules versus arbitrary rules and deterministic versus nondeterministic sets of rules.

Combining these features results in a few thousand corresponding language families, which are compared with respect to their language generating power: equality, (proper) inclusion and incomparability relations between these language families are established. The paper has a survey character; it does not contain proofs, but includes references where these proofs can be found.

{Reviewer’s remark: Many of the language families considered in this paper will probably play a limited role in computer science.}

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