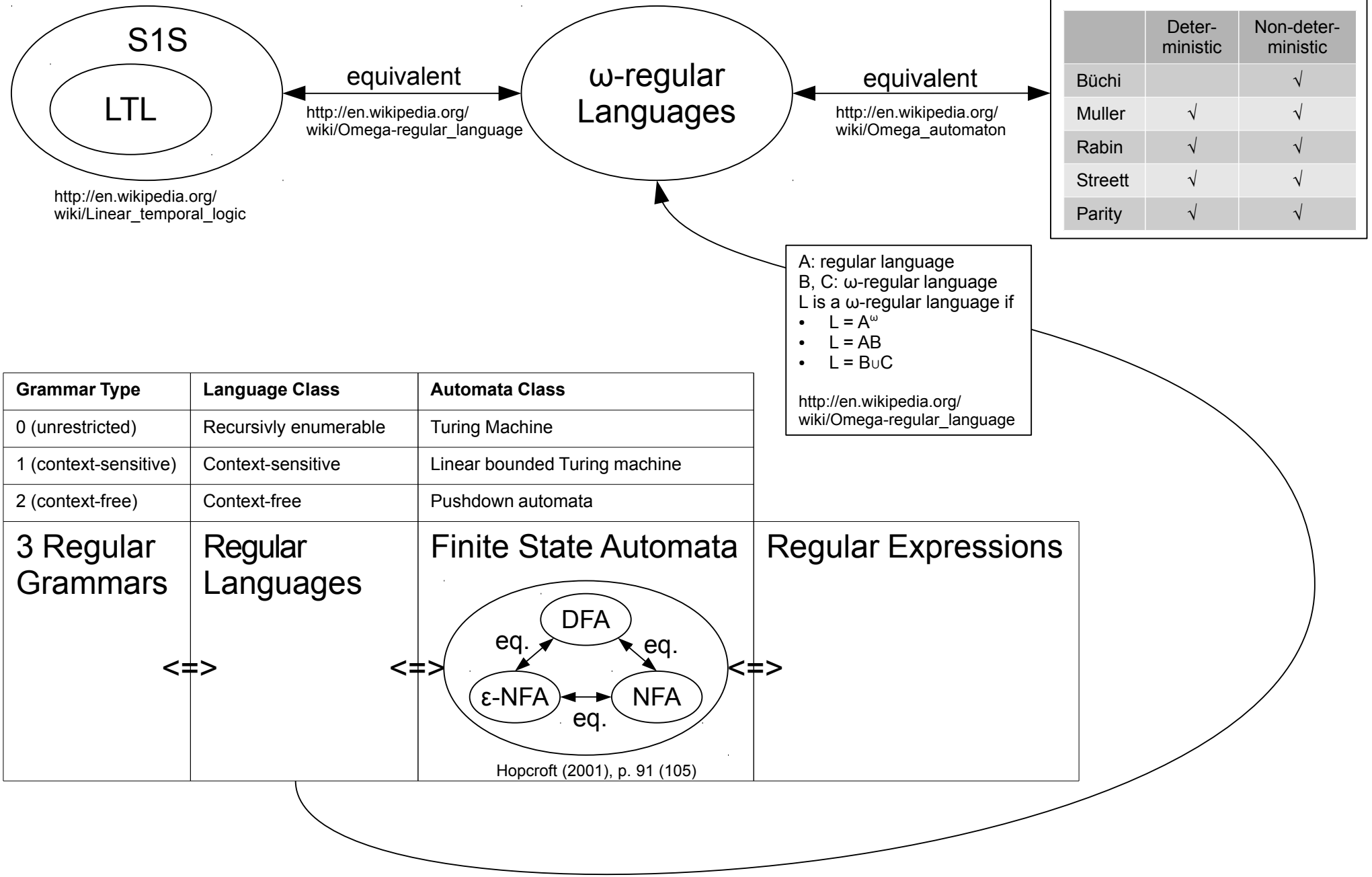
S1S
LTL
http://en.wikipedia.org/
wiki/Linear_temporal_logic
equivalent
http://en.wikipedia.org/
wiki/Omega-regular_language
ω-regular
Languages
equivalent
http://en.wikipedia.org/
wiki/Omega_automaton
ω-Automata
Deter-
ministic
Non-deter-
ministic
Büchi
√
Muller
√
√
Rabin
√
√
Streett
√
√
Parity
√
√
A: regular language
B, C: ω-regular language
L is a ω-regular language if
• L = A^ω
• L = AB
• L = B∪C
http://en.wikipedia.org/
wiki/Omega-regular_language
Grammar Type
Language Class
Automata Class
0 (unrestricted)
Recursivly enumerable
Turing Machine
1 (context-sensitive)
Context-sensitive
Linear bounded Turing machine
2 (context-free)
Context-free
Pushdown automata
3 Regular
Grammars
<=>
Regular
Languages
<=>
Finite State Automata
DFA
eq.
eq.
ε-NFA
NFA
eq.
<=>
Regular Expressions
Hopcroft (2001), p. 91 (105)