B) Decision-Free Firing Petri Nets

C) Merlin's Time Petri Nets

D) Colored Petri Nets with Infinite Colors

A) Extended Petri Nets

It is well-known from automata theory that a register machine with the following three instructions is equivalent to a Turing machine.

I(n): Increase register n by one.

D(n): Decrease register n by one

J(n)[s]: Jump to statement s if register n is zero. (This is a "zero-testing ability".)

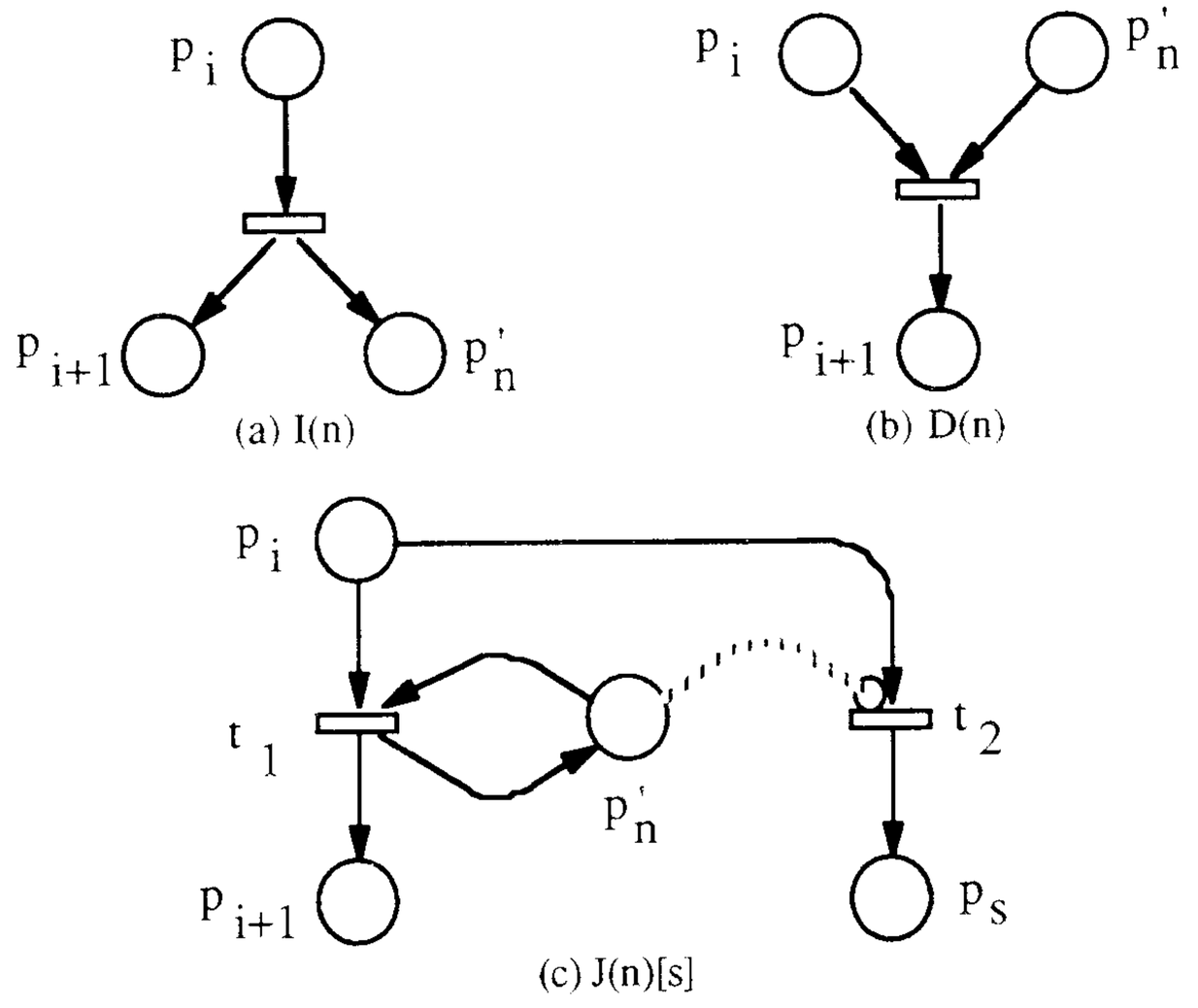

Fig. 2.14 Instruction sets for a register machine

As is shown in Fig.2.14, an extended Petri net (a Petri net with inhibitor arcs) can simulate the above three instructions and thus has the modeling power of a Turing machine.

B) Decision-Free Firing Petri Nets

Def. A *decision-free firing Petri net* is a behaviorally conflict-free net where all transitions fire as soon as they are enabled. A net (N, M_0) is said to be *behaviorally*