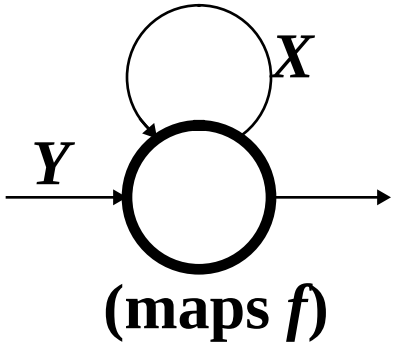
Dataflow Processes — A Special Case

- **A *firing function* maps a finite number of input tokens onto output tokens.**
- **A set of *firing rules* specify when an actor can fire.**
- **A firing *consumes* input tokens and *produces* output tokens.**
- **A sequence of firings is a *dataflow process*, also called an *actor.***

Dataflow Processes

- **A *dataflow process* is F = (maps f), where f: $S^m \rightarrow S^n$.**
- **f is called the *firing function*.**
- **Choose f so that F is continuous.**
- **Vuillemin-sequential (blocking reads Kahn-MacQueen) is sufficient.**
- **This is not entirely satisfactory:**



The identity firing function $f(x, y) = (x, y)$ does not yield an identity dataflow process.