

3.31

Informally, a wire's action-procedures are a list of 'updates' to other wires and side-effects that happen when that wire's signal gets changed.

accept-action-procedure! gets called when a wire gets connected to another chip.

Immediately calling the procedure being added to the list as part of the initialization is necessary so the "logic" can flow through the system - after all, a wire (with a signal value!) just got connected to a chip - what are the chip's outputs? Well, better immediately call the proc. Otherwise, if a wire's signal doesn't change, a potentially infinite delay may be introduced.

Half-adder example:

```
(Probe 'sum sum)
[... Nothing yet!]
```

```
(Probe 'carry carry)
[... Nothing yet!]
```

```
(half-adder input-1 input-2 sum carry)
ok
```

```
(set-signal! input-1 1)
```

```
done
```

```
;
```

Nothing added to agenda, no actions occur, no signals propagated.

Potential  
Chaos  
because  
of  
the  
agenda  
structure?

delay... and it doesn't...  
no... and it doesn't...