Light-sensitive (dark-activated) Relay circuit

How does this work?

The left side of the circuit forms a voltage divider (see handout on the voltage divider) with the variable resistor and the CdS cell (cadmium sulfide photo-resistor). Changing amounts of light on the photo-resistor causes a proportionately changing amount of electromotive pressure (in volts) at the base of the transistor. When there is sufficient pressure at the base of the transistor to pass it’s switching threshold, the path to ground from the transistor’s collector to its emitter switches to a very low impedance, looking virtually like a conductor. When that happens, the path of least resistance from power to ground is through the coil of the relay. Current through the coil energizes it, pulling the relay switch closed.

Note:
The relay as pictured on the left is a double-pole single-throw switch, while the electrical schematic at right describes a single-pole double-throw switch. Neither the drawing nor the schematic show a circuit attached to the switched load of the relay.