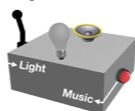


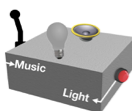
## Observer absent

Hypotheses:

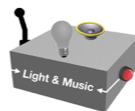
$p = 0.33$



$p = 0.33$

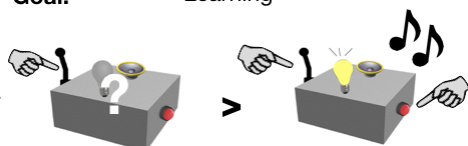


$p = 0.33$



Goal:

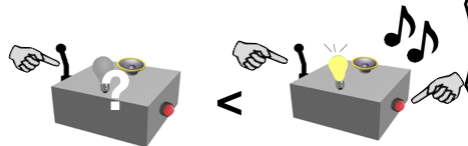
Learning



Outcome: Music OR light  
OR nothing,  
Can fully disambiguate

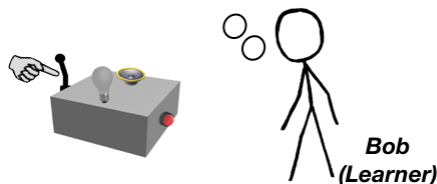
Outcome: Music and light:  
Completely ambiguous  
between hypotheses

Performance



Outcome: Music OR light  
OR nothing,  
Risks no immediate reward

Outcome: Music and light:  
Guarantees the most  
salient reward

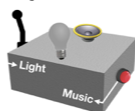


**Bob**  
(Learner)

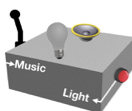
## Observer present

Hypotheses:

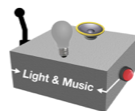
$p = 0.33$



$p = 0.33$

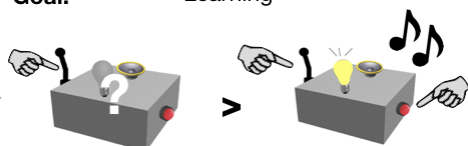


$p = 0.33$



Goal:

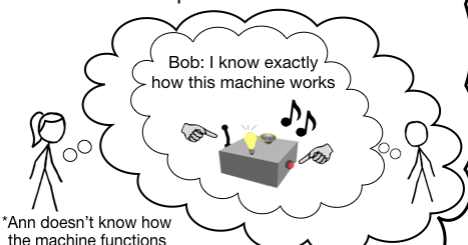
Learning



Outcome: Music OR light  
OR nothing,  
Can fully disambiguate

Outcome: Music and light:  
Completely ambiguous  
between hypotheses

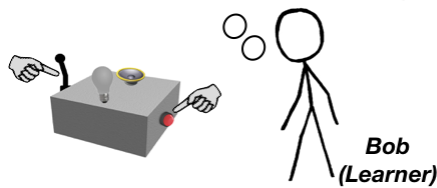
Self-presentation



\*Ann doesn't know how  
the machine functions



**Ann**  
(Observer)



**Bob**  
(Learner)