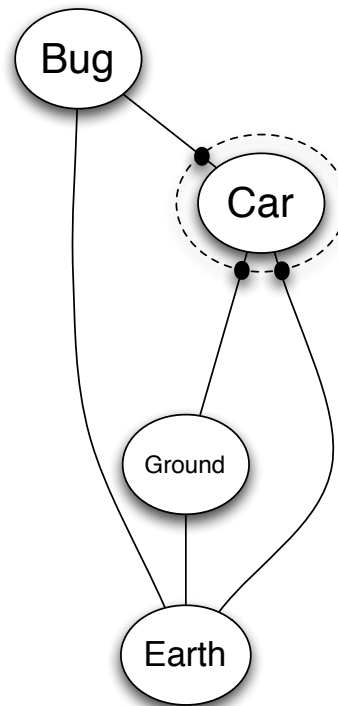
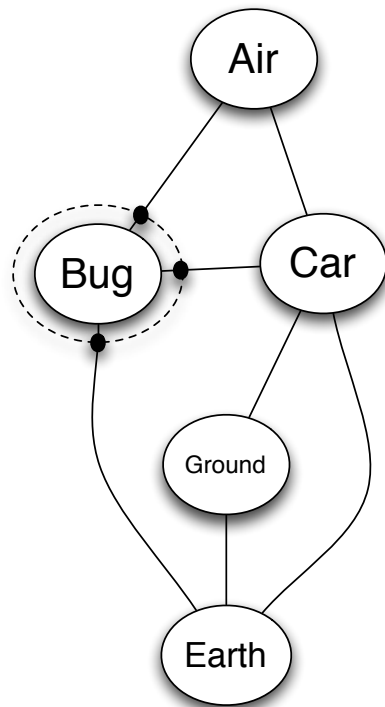


3D Force Diorama Bug Meets Car



For the bug...

$$F_{g,E \rightarrow bug} = (.05kg)(-9.81 \frac{N}{kg}) = -.49N$$

$$F_{lift,air \rightarrow bug} = -F_{g,E \rightarrow bug} = .49N$$

$$F_{a,car \rightarrow bug} = 6000N$$

For the car...

$$F_{g,E \rightarrow car} = (1300kg)(-9.81 \frac{N}{kg}) = -12700N$$

$$F_{\perp,road \rightarrow car} = -F_{g,E \rightarrow car} = 127000$$

$$F_{a,bug \rightarrow car} = -6000N$$

