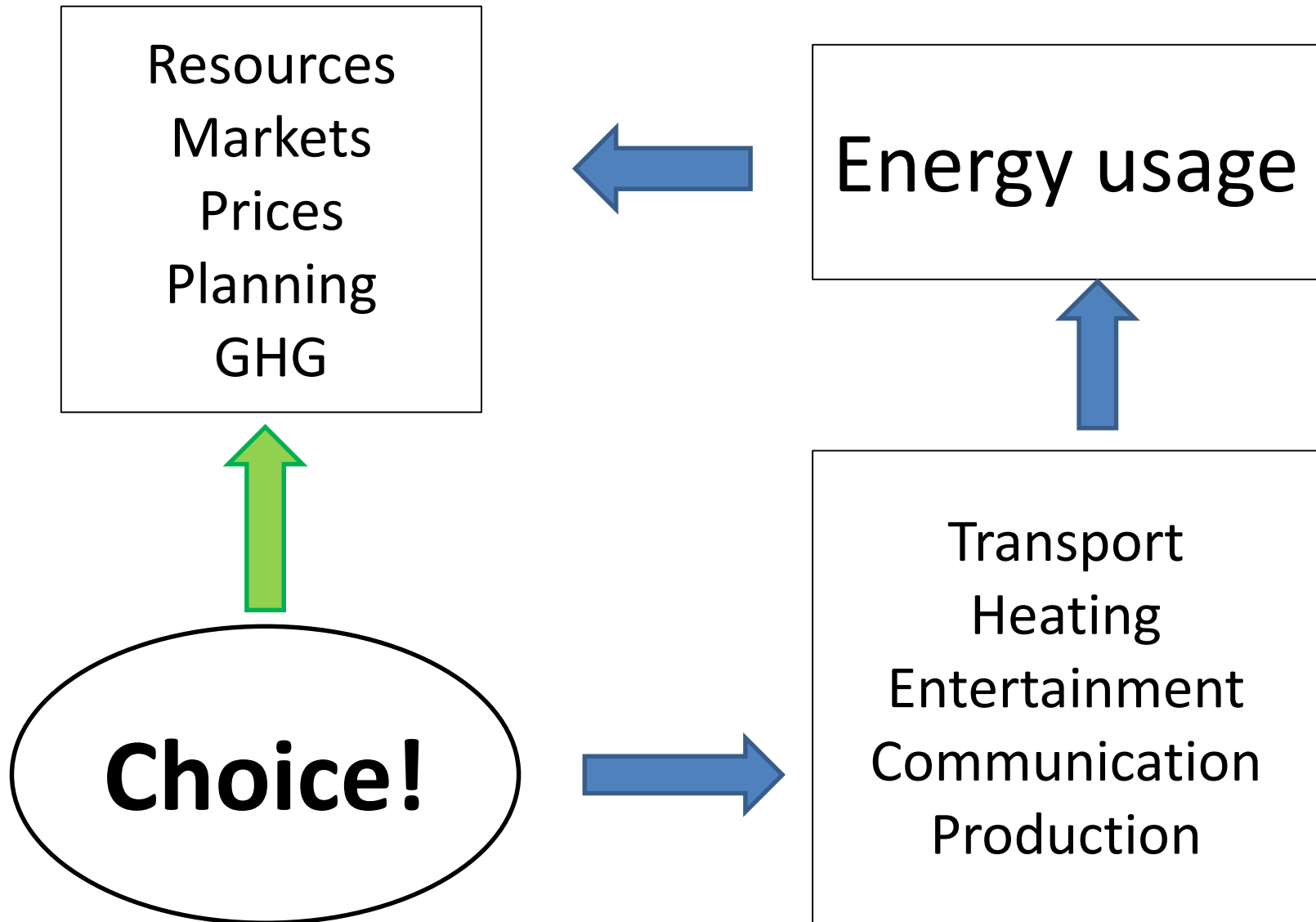


MODELLING OF BEHAVIOURAL ASPECTS

Social behaviour in linear optimisation models



Why are we modelling?



Modelling is simplification

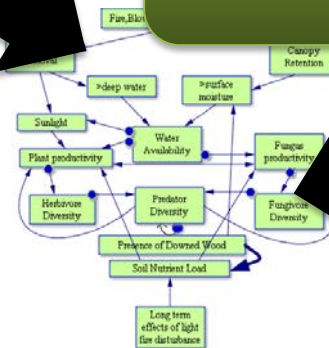
Reality



Simplification



Interaction



Equations

$$\frac{\partial}{\partial t} \left[-\left(\frac{\hbar}{4\pi m}\right)^2 \frac{d^2 \psi(x)}{dx^2} + 2m(E - V(x)) \psi(x) \right] = 0$$

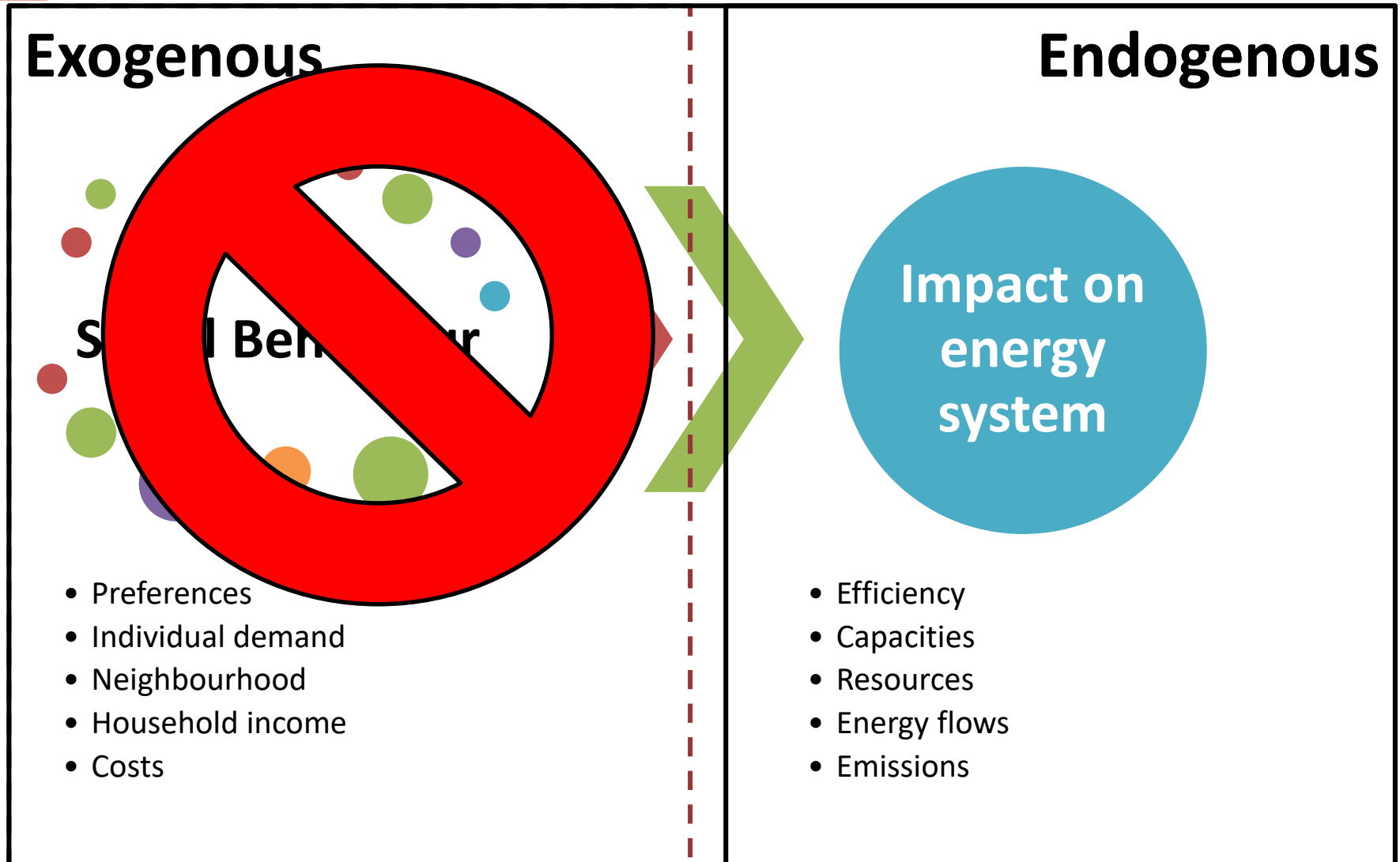
$$\frac{\partial}{\partial t} \left[-\left(\frac{\hbar}{4\pi m}\right)^2 \frac{d^2 \psi(x)}{dx^2} + 2m(E - V(x)) \psi(x) \right] = 0 \quad \left\{ \begin{array}{l} \text{USING (5) \& (6)} \\ \frac{\partial}{\partial t} \psi = 0 \end{array} \right.$$

$$\int \left[\left(\frac{\hbar}{4\pi m}\right)^2 \frac{d^2 \psi(x)}{dx^2} + 2m(E - V(x)) \psi(x) \right] \psi(x) dx = 0 \quad \left\{ \begin{array}{l} \text{INTEGRATION BY PARTS} \\ \psi = 0 \text{ AT BOUNDARIES} \end{array} \right.$$

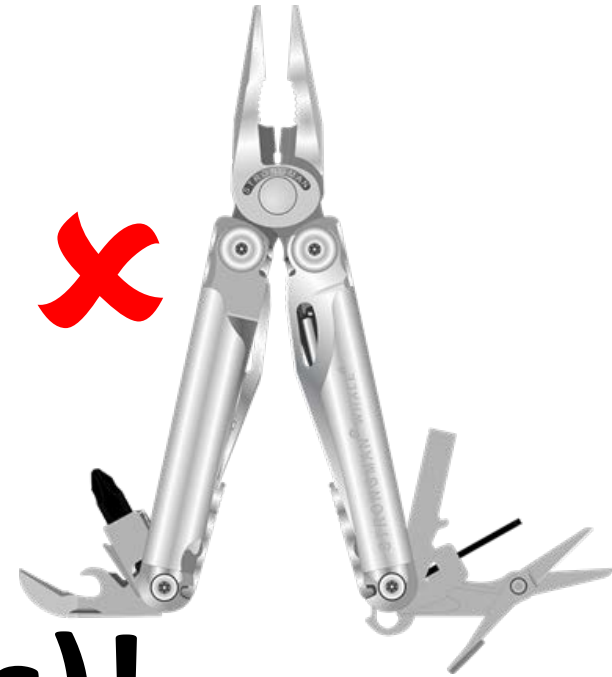
$$\boxed{\frac{d^2 \psi(x)}{dx^2} + 2m\left(\frac{\hbar}{4\pi m}\right)^{-2} (E - V(x)) \psi(x) = 0} \quad \left\{ \begin{array}{l} \psi(x) = 0 \text{ FOR ALL} \\ \text{VARIATIONS } \psi(x) \end{array} \right.$$

SCHRÖDINGER'S WAVE EQUATION

Exogenous vs endogenous



One size does not fit all!



Use the right tool(s)!

