Test of Goodness for Population Receptive Field Estimates

simulation study

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Stimulation

We first used the exact drifting bar stimululation in [**?**]:

Data Generation

BOLD response model

$$B(t) = \mathcal{H}(r(t, \Theta = \theta)) + e(t)$$

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Linear or Non-linear HRF function

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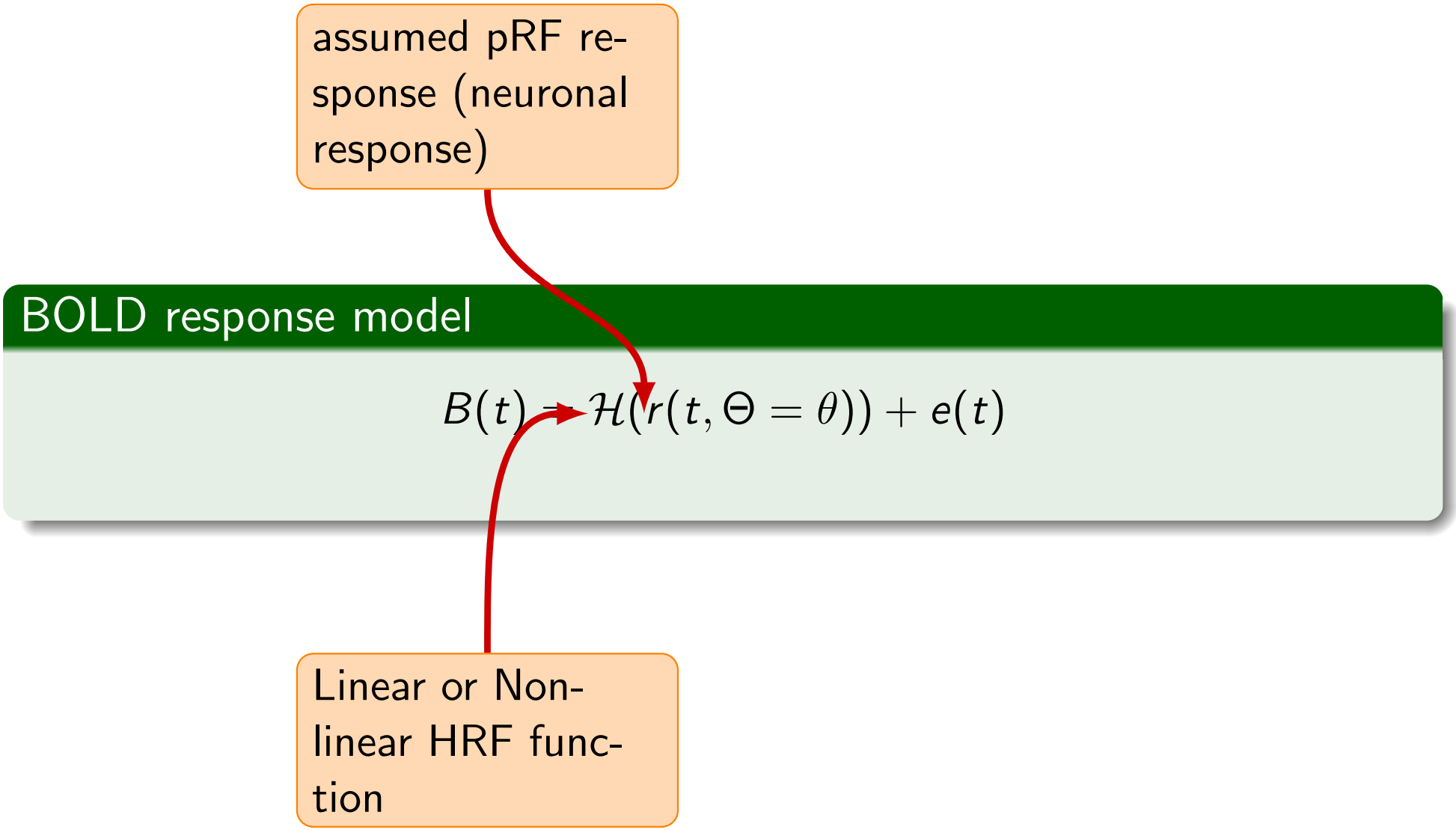
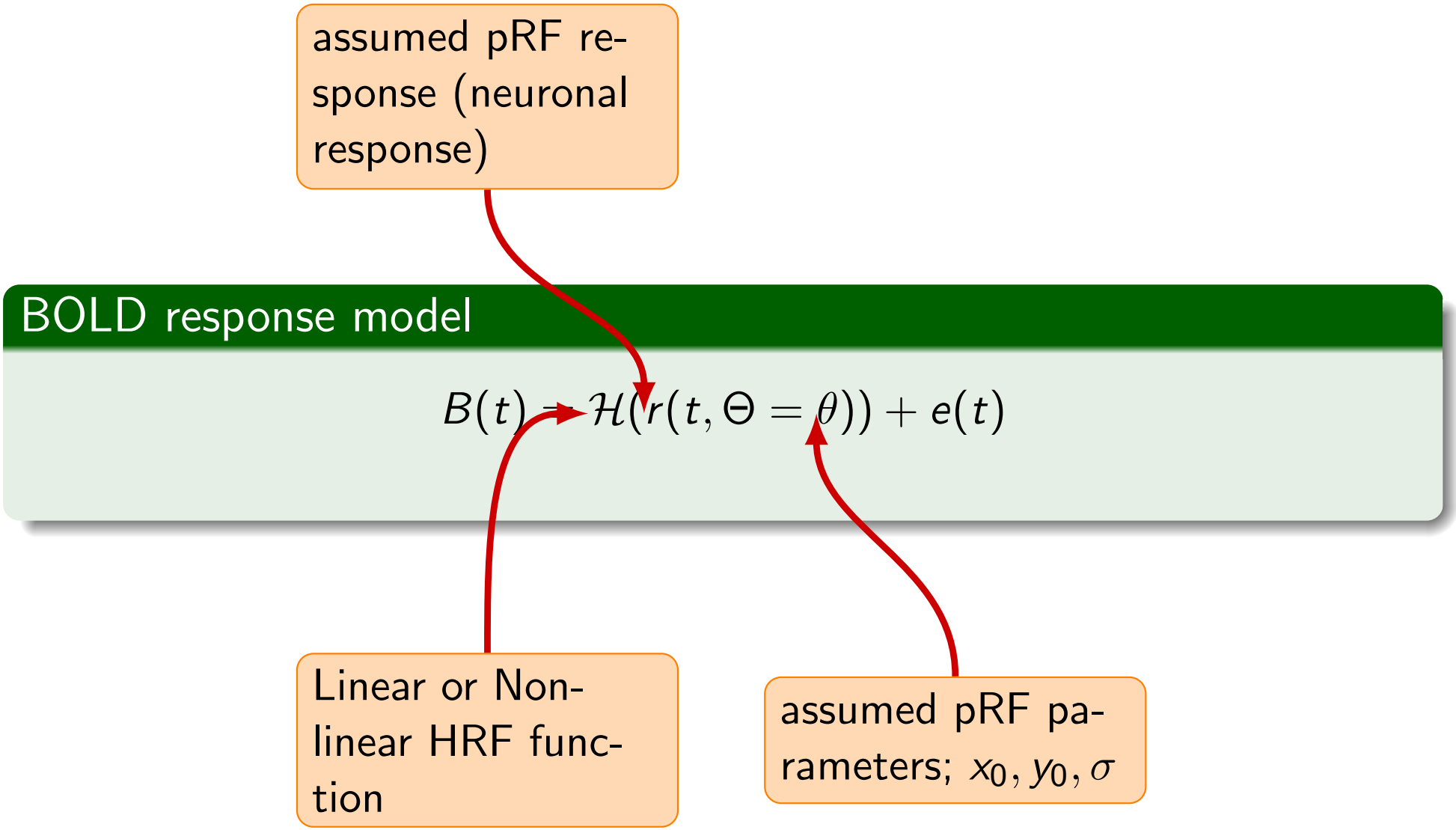


Data Generation



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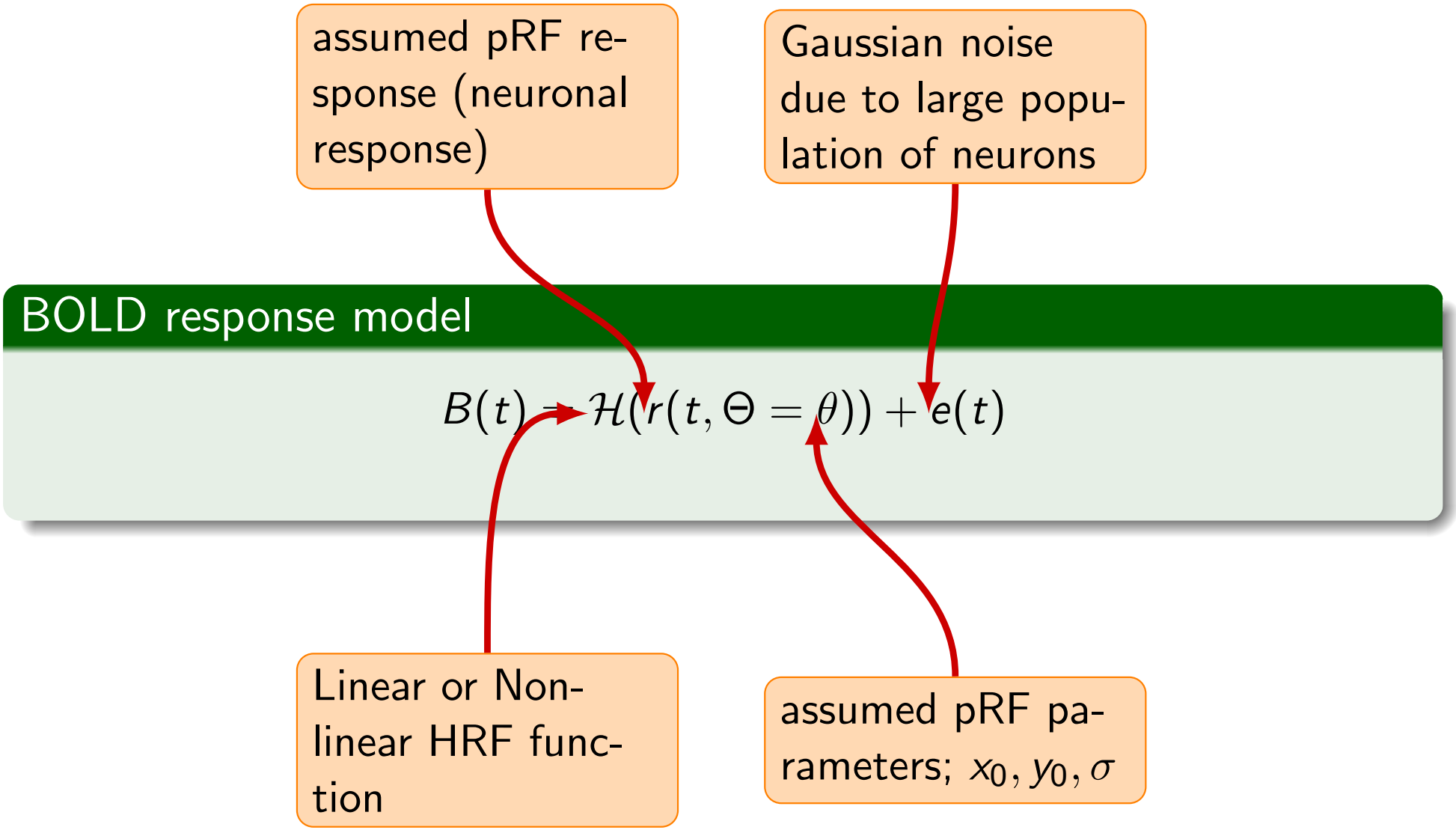

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- Neurons within a small region of visual cortex respond to stimuli within a restricted region of the visual field.
- The population response of such neurons in general can **not** be modeled using a model that sums contrast linearly across the visual field. hence, Compressive spatial summation (CSS) model is used,

pRF response model

$$r(t, \Theta = \theta) = (\sum_{x,y} s(x, y, t) g(x, y, \theta))^n$$

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spatial linearity factor from 0 to 1