Feedback, trafficking and morphogen scaling

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During development tissues develop into organs of stereotyped size and shape. Morphogens are secreted from discrete regions in developing organs and form spatial concentration gradients that guide gene activation, pattern formation and tissue growth. Morphogen gradients scale with tissue size, ensuring that morphological patterns remain proportionate in organs of different size. How key molecular players ensured morphogen scaling is not clear. Motivated by observations of the BMP-type growth factor **Decapentaplegic (Dpp)** in the fly wing, we explore the potential role of local feedback driven by Dally/Dpp interactions in morphogen scaling.