#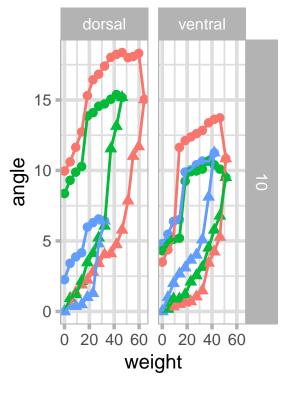 angle from weight