The asymmetries in our mind

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1. How was brain asymmetry discovered?
   - Paul Broca: the first person to provide a strong case for the relationship between damage to the left hemisphere and loss of speech.
   - Studies with brain damage patients suggested that the left hemisphere is important for verbal abilities whereas the right hemisphere is important for visual spatial abilities.
   - Hemispatial neglect
   - Prosopagnosia – face blindness

2. Splitting the brain
   - Visual pathway: left visual field → right hemisphere; right visual field → left hemisphere
   - In split-brain patients: left and right hemispheres become independent.
     - Language abilities in the right hemisphere
     - Left hemisphere the interpreter
     - Face processing
     - Visual spatial processing
   - Hemispheric specialization is not an all-or-none phenomenon but represents a continuum: the left and right hemispheres differ in both approach and efficiency.

3. Asymmetries in the normal brain
   - Divided visual field studies
   - Chimeric face judgments
   - Pseudoneglect effect: line bisection and greyscales tasks
   - Handedness and thoughts
     - Body-specificity of emotion
     - Space-valence mapping

Summary:
- Left hemisphere: language, right-hand
- Right hemisphere: visual spatial abilities, visual spatial attention, face processing, left-hand
- However, the two hemispheres always work together!

Submit your Science and Myth paragraph to us to win a VIP HKU lab tour!

1. Select a common claim about the brain from the mass media.
2. Look for scientific evidences supporting or against the claim.
3. Write a short paragraph (maximum 300 words) with your references if any (not included in the word count) and submit it to us through email (hkuybs@hku.hk) by **Feb 14 2014, 23:59 pm** (You have three weeks!)

Winner selection criteria: How surprising the difference between the myth and the science is (the more the better), and its scientific significance.