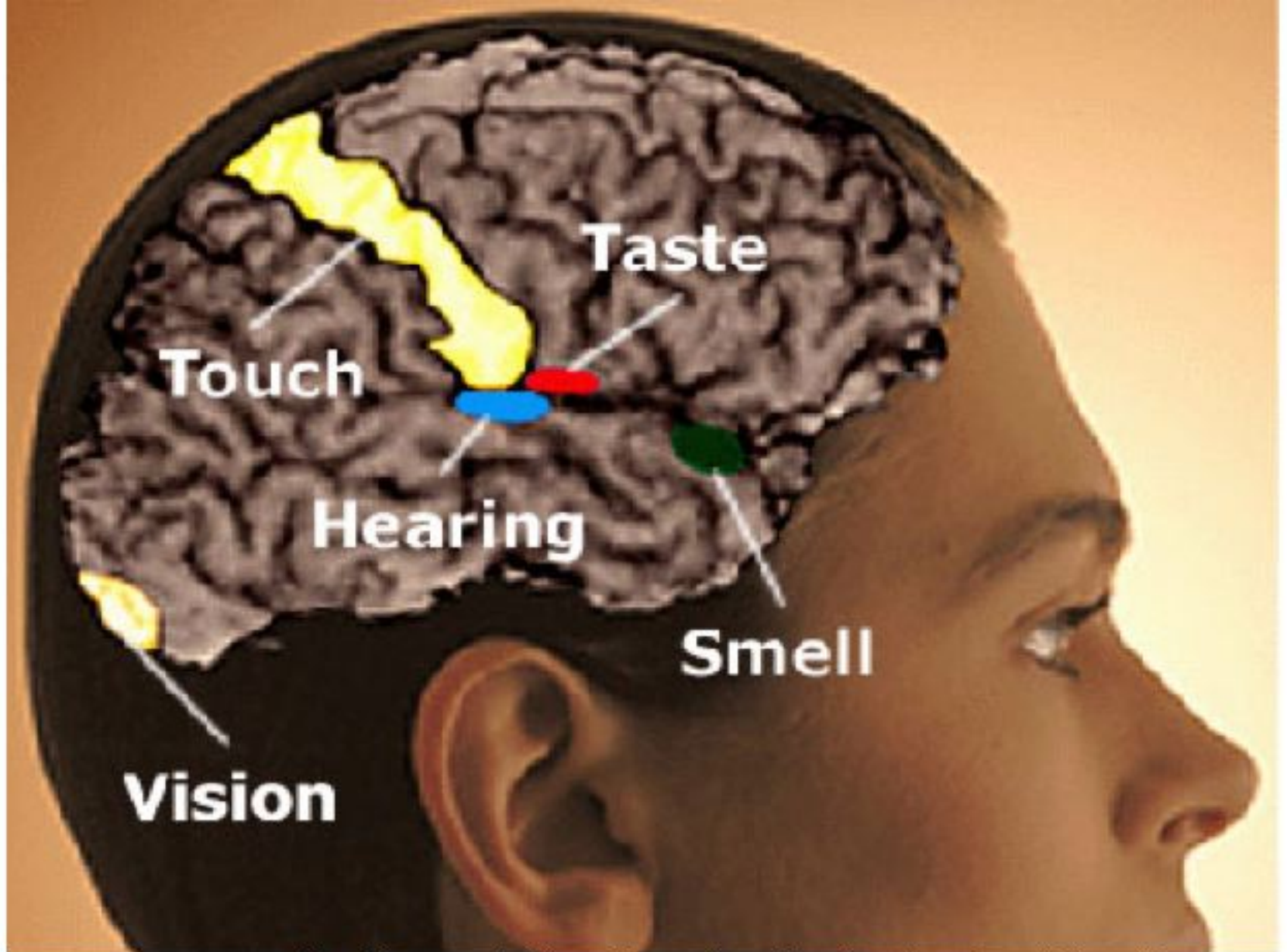


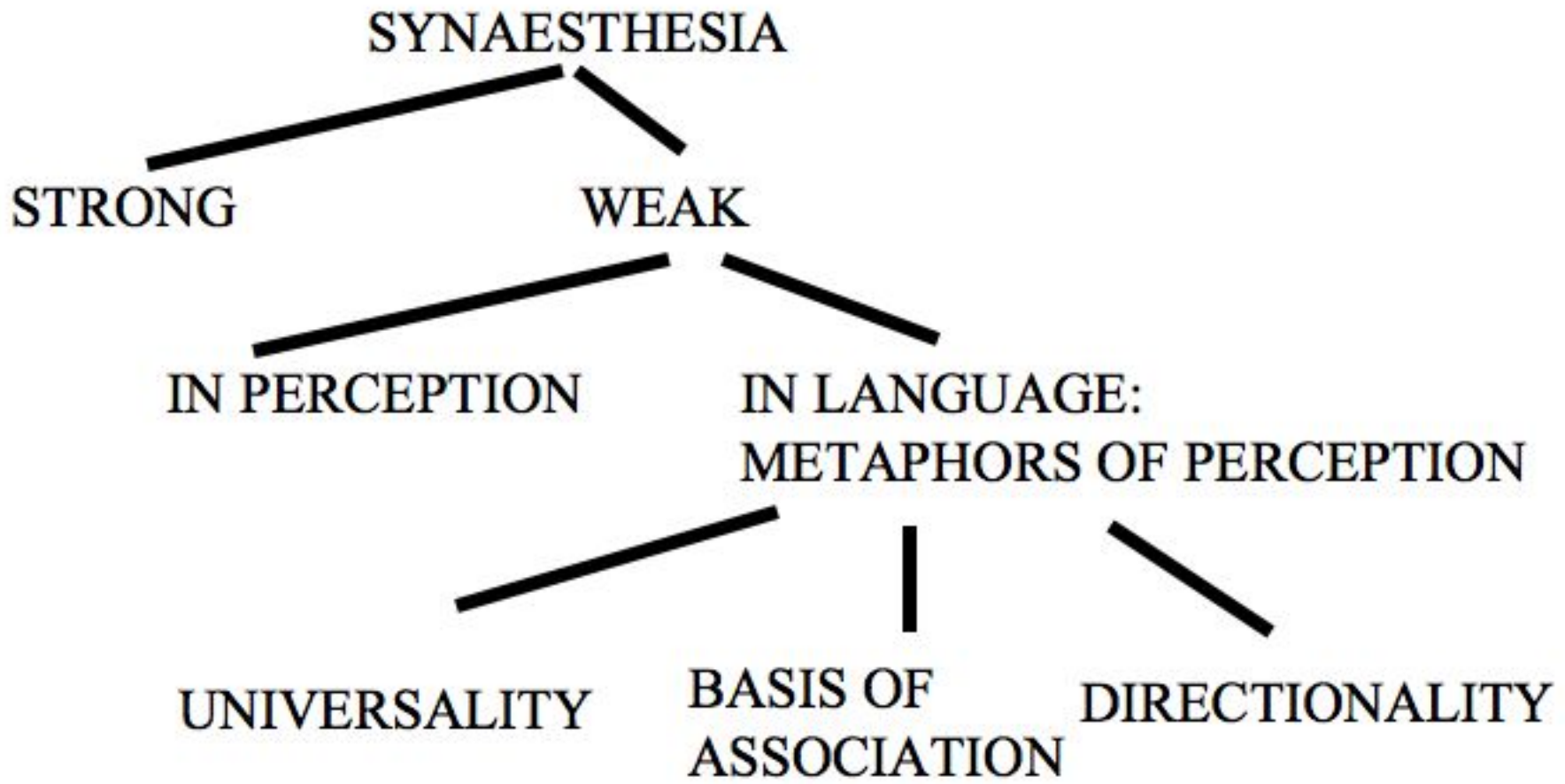
**MINGLING THE SENSES: BETWEEN
LANGUAGE AND PERCEPTION**

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TEL AVIV UNIVERSITY

VIENNA, February 2009



Each sense is controlled by a defined region in the brain. *(Credit: Massachusetts General Hospital)*



Cross modal similarity in perception and language

Complex perceptual experiences:

- Perceiving correspondences between the visual information and music in films
- Perception of correspondences between movement and music
- Matching projected colors and musical notes
- Assigning various sensory (e.g., auditory) associations to visual features (e.g., color).

Language: verbal metaphors of perceptual stimuli

Pitch – height metaphors: *low and high pitches*

Pitch – texture metaphors: *soft voices, hard voices*

Strong synaesthesia:

Phenomenal experiences in which stimuli that are normally considered appropriate to one modality arouse not only the sensory and perceptual of that modality but also regularly and reliably arouse the sensory qualities of another" (Marks, 1999)

WEAK SYNAESTHESIA:

**THE ABILITY TO OBSERVE CORRESPONDENCES BETWEEN
DIFFERENT MODALITIES**

Cross modal similarities in perception:

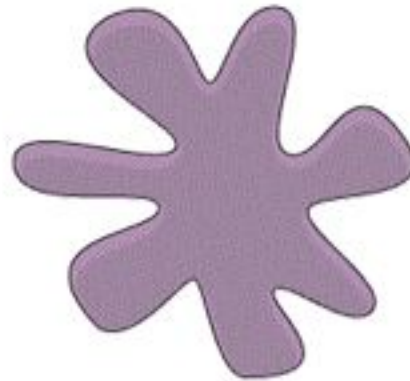
- Sneezing is brighter than coughing

-- Higher pitches are matched with lighter colors (low pitched tones are shaded darkly, in somber, black colors, and high-pitched tones are shaded lightly , in white, pale colors (Marks: The unity of the Senses, p. 50-75).)

-- Louder sounds are matched with brighter lights (Marks: The unity of the Senses, p. 50-75).

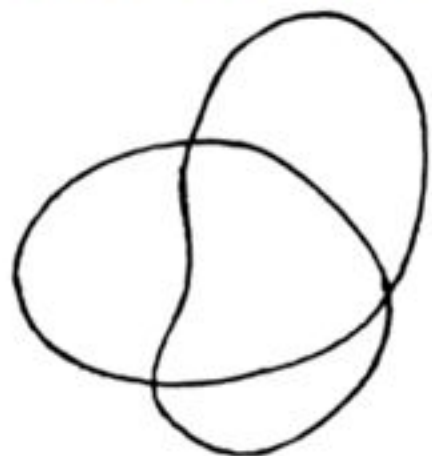
-The case of MALUMA AND TAKETE (Kohler 1947)

BOOBA



KIKI

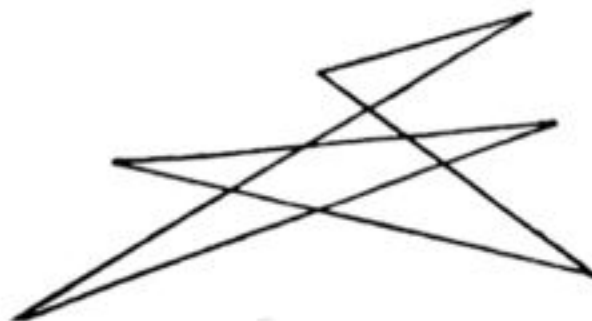
MALUMA



*Quite, slow,
Light, blunt*

*Peaceful, friendly,
relaxed, weak,
tender*

TAKETE



*Noisy, fast,
heavy, sharp*

*Aggressive,
Unfriendly,
tense, strong, tough*

(Lindauer, 1990)

**Sensory
metaphors**

**Affective
metaphors**

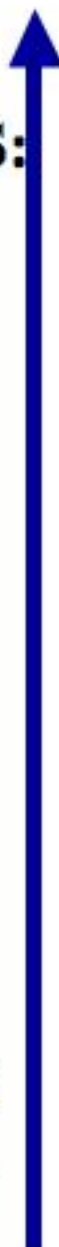
SOURCE: *TASTE* **TARGET:** *SOUND*

sweet silence:

TARGET IS HIGHER
THAN SOURCE

HIGHER MODALITIES:
SIGHT, SOUND

LOWER MODALITIES:
TOUCH, TASTE, SMELL



The structural options:



TARGET is
higher than
SOURCE

Silent sweetness

TARGET is
lower than
SOURCE

Sweet silence

Synaesthetic (cross-modal) similarity

- Applies to all modalities
- Universal
- Early development (innate?)
- Based on basic meaning dimensions
- Appears in perception and language
- Directional (in language)

Synaesthetic (cross-modal) similarity

- Distinguished from metonymic association
- Applies to all modalities
- Universal
- Early development (innate?)
- Based on basic meaning dimensions
- Appears in perception and language
- Directional (in language)

