

**A graded-embodied theory account for the
processing of emotional stimuli. The case
of sentences, images, and faces**

Fernando Marmolejo-Ramos

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Abstract

A series of experiments were devised to test the idea that sensorimotor systems activate during the processing of emotionally-laden stimuli. In Experiments 1 and 2 participants were asked to judge the pleasantness of emotionally-laden sentences while participants held a pen in the mouth. Experiments 3 and 4 were similar to the previous experiments but the experimental materials were emotionally-laden images. In Experiment 5 and 6 the same bodily manipulation used throughout the previous experiments was kept while participants judged facial expressions. The first pair of experiments replicated findings suggesting that sensorimotor systems are activated during the processing of emotionally-laden language. However, follow-up experiments suggested that dual activation of both perceptual and motor systems is not always necessary. For the particular case of emotionally-laden stimuli, the results suggested that the perceptual system seems to drive the processing. It is also shown that a high resonance between sensorimotor properties afforded by the stimuli and the sensorimotor systems activated in the cognizer elicit emotional states. The results invite to revise strong versions of embodiment accounts and rather support a graded-embodiment view.

Keywords: graded-embodied theory, emotions, images, faces, language comprehension

Statement of Authorship

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Fernando Marmolejo-Ramos and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Fernando Marmolejo-Ramos

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Table of Contents

Overview	1
Chapter 1. Embodied theories of cognition. The case of concrete concepts	4
1.1. Further empirical evidence supporting the embodied framework.	8
1.2. Sensorimotor properties are activated automatically, relate to non-dominant modalities, and are fine-grained.	15
1.3. On the bidirectionality between motor action and language processing	21
1.4. Chapter summary and discussion	24
Chapter 2. Embodied theories of cognition II. The case of abstract concepts and revised embodied cognition theory	27
2.1. Linking abstract concepts and sensorimotor properties via metaphors	32
2.2. A critique to the embodied cognition framework	37
2.3.1. A revised version of the structure mapping theory as explanatory model	40
2.3. Chapter summary and discussion	47

Chapter 3. Embodied theories of cognition III. The particular case of emotions	51
3.1. On emotions, other affective processes, and their relation to the perception-cognition continuum	51
3.1.1. Emotions and sensorimotor properties	55
3.1.2. More evidence supporting the link between emotions and sensorimotor properties. A social embodiment approach.	59
3.1.3. On emotion elicitation via bodily manipulations	61
3.1.3.1. The metaphoric mapping explanation to the embodiment of emotions	70
3.2. On the processing of emotional stimuli. Images and faces in particular	71
3.2.1. Processing of faces	78
3.2.2. Embodiment and the processing of faces	81
3.3. Chapter summary and discussion	85
3.3.1. On the elicitation of emotional states	86
3.3.2. On the following series of experiments	93
 Chapter 4. Experiments 1 and 2. Replication of Havas et al. (2007)	 98
4.1. Experiment 1	100
4.1.1. Participants	100

4.1.2. Materials	100
4.1.3. Procedure	101
4.1.4. Design and statistical analyses	103
4.1.5. Results	103
4.1.6. Discussion	105
4.2. Experiment 2	108
4.2.1. Participants	108
4.2.2. Materials	109
4.2.3. Procedure	111
4.2.4. Design and statistical analyses	112
4.2.5. Results	112
4.2.6. Discussion	114
Chapter 5. Experiment 3 and 4. Emotionally-laden and neutral images judging task	120
5.1. Experiment 3	123
5.1.1. Participants	123
5.1.2. Materials	123
5.1.3. Procedure	125
5.1.4. Design and statistical analyses	126
5.1.5. Results	127
5.1.6. Discussion	128
5.2. Experiment 4	130
5.2.1. Participants	130
5.2.2. Materials	131

5.2.3. Procedure	131
5.2.4. Design and statistical analyses	132
5.2.5. Results	133
5.2.6. Discussion	135
Chapter 6. Experiment 5 and 6. Rating and judging of facial images task	140
6.1. Experiment 5	144
6.1.1. Participants	144
6.1.2. Materials	145
6.1.3. Procedure	146
6.1.4. Design and statistical analyses	146
6.1.5. Results	147
6.1.6. Discussion	149
6.2. Experiment 6	153
6.2.1. Participants	153
6.2.2. Materials	154
6.2.3. Procedure	154
6.2.4. Design and statistical analyses	155
6.2.5. Results	156
6.2.6. Discussion	159
Chapter 7. General discussion	164
7.1. A note on how methodological and statistical decisions can influence findings	173

References	177
Appendix A: A potential task to determine the automaticity of sensorimotor systems during the processing of emotionally-valenced stimuli	201
Appendix B: A note on the analyses and statistics reported	204
Appendix C: experimental sentences used in Experiment 2	208
Appendix D: Further comments on speed-accuracy trade-off (SAT) functions	220
Appendix E: neutral and positive images selected from IAPS data base and used in Experiment 3	222
Appendix F: neutral images selected from IAPS data base and used in Experiment 4	223

Figures

<i>Figure 1.</i> Model of a conceptual system based on amodal symbols (after Barsalou, 1999).	5
<i>Figure 2.</i> Model of a conceptual system based on perceptual symbols (after Barsalou, 1999).	6
<i>Figure 3.</i> Model of priming effect on motor responses (after Ansorg et al., 2010).	17
<i>Figure 4.</i> Revised version of the structure-mapping theory (analogical reasoning) or SMTr.	44
<i>Figure 5.</i> Processing of affective information in relation to the perception-cognition continuum.	54
<i>Figure 6.</i> Pen-in-mouth facial disposition.	64
<i>Figure 7.</i> Levels of resonance between the cognizer sensorimotor systems and the sensorimotor properties that the stimuli imply/afford.	87
<i>Figure 8.</i> Possible strength of emotional state	

elicited as an effect of experimental design.	91
<i>Figure 9.</i> Photographs illustrating the pen manipulation.	102
<i>Figure 10.</i> Conditional accuracy function plot for the judgment of both pleasant and unpleasant sentences in Experiment 1 and 2.	111
<i>Figure 11.</i> Mean response times for the pen condition and sentence valence interaction.	112
<i>Figure 12.</i> Results of Havas et al. (2007, Table 1) represented as a bar chart.	115
<i>Figure 13.</i> Mean response times for the main effect of image valence given pen condition and key response assignment in Experiment 3.	127
<i>Figure 14.</i> Mean response times for the main effect of image valence given pen condition and key response assignment in Experiment 4.	134

<i>Figure 15.</i> Facial expressions used in Experiments 5 and 6.	145
<i>Figure 16.</i> Mean ratings of facial expressions given pen condition and rating assignment (Experiment 5).	148
<i>Figure 17.</i> Participants' mean mood rating given pen condition and rating assignment (Experiment 5).	149
<i>Figure 18.</i> Mean proportion categorization of 11 facial expressions given pen condition and key response assignment (Experiment 6).	157
<i>Figure 19.</i> Mean categorization RTs of 11 facial expressions given pen condition and key response assignment (Experiment 6).	158
<i>Figure 20.</i> Participants' mean mood rating given pen condition and key response assignment (Experiment 6).	159

Tables

<i>Table 1.</i> Perceived level of emotional state determined by the level of sensorimotor resonance in combination with type of experimental design.	92
<i>Table 2.</i> Mean mood rating in Experiment 1.	105
<i>Table 3.</i> Mean mood rating in Experiment 2.	113
<i>Table 4.</i> Mean valence and arousal for images used in Experiment 3.	125
<i>Table 5.</i> Mean mood rating in Experiment 3.	128
<i>Table 6.</i> Mean mood rating in Experiment 4.	135