



UNIVERSITÉ  
DE GENÈVE

Archive ouverte UNIGE

<https://archive-ouverte.unige.ch>

Ouvrage collectif

2013

Extract

Open Access

This file is a(n) Extract of:

---

## Components of Emotional Meaning : A Sourcebook

---

Fontaine, Johnny J.R. (ed.); Scherer, Klaus R. (ed.); Soriano, Cristina (ed.)

This publication URL: <https://archive-ouverte.unige.ch/unige:96673>

Publication DOI: [10.1093/acprof:oso/9780199592746.001.0001](https://doi.org/10.1093/acprof:oso/9780199592746.001.0001)

© This document is protected by copyright. Please refer to copyright holders for terms of use.

## Series in Affective Science

Series Editors: Richard J. Davidson, Paul Ekman and Klaus R. Scherer

*The Evolution of Emotional Communication* Eckart Altenmüller, Sabine Schmidt, and Elke Zimmermann (eds.)

*The Neuropsychology of Emotion* John C. Borod

*Persons, Situation, and Emotions: An Ecological Approach* Herman Brandstätter and Andrzej Elias

*Handbook of Emotion Elicitation and Assessment* James A. Coan and John J.B. Ellen (eds.)

*Anxiety, Depression, and Emotion* Richard J. Davidson

*What the Face Reveals: Basic and Applied Studies of Spontaneous Expression Using the Facial Action Coding System (FACS) 2e* Paul Ekman and Erika L. Rosenberg (eds.)

*The Nature of Emotion: Fundamental Questions* Paul Ekman and Richard J. Davidson

*The Psychology of Gratitude* Robert A. Emmons and Michael E. McCullough (eds.)

*Who Needs Emotions? The brain meets the robot* Jean-Marc Fellous and Michael A. Arbib (eds.)

*Emotions in Psychopathology: Theory and Research* William F. Flack and James D. Laird (eds.)

*Shame: Interpersonal Behaviour, Psychopathology, and Culture* Paul Gilbert and Bernice Andrews (eds.)

*Pleasures of the Brain* Martin L. Kringelbach and Kent C. Berridge

*Infant Chimpanzee and Human Child: A Classic 1935 Comparative Study of Ape Emotions and Intelligence* N.N. Ladygina-Kohts (deceased) and Frans B.M. de Waal (eds.) Boris Vekker (translator)

*Feelings: The Perception of Self* James D. Laird

*Cognitive Neuroscience of Emotions* Richard D. Lane and Lynn Nadel (eds.)

*The Development of Social Engagement: Neurobiological Perspectives* Peter J. Marshall and Nathan A. Fox (eds.)

*Science of Emotional Intelligence: Knowns and Unknowns* Gerald Matthews, Moshe Zeidner, and Richard D. Roberts (eds.)

*Affective Neuroscience: The Foundations of Human and Animal Emotions* Jaak Panskepp

*Nonverbal Behaviour in Clinical Settings* Pierre Philippot, Robert S. Feldman, and Erik J. Coats (eds.)

*Emotion in Memory and Development: Biological, Cognitive, and Social Considerations* Jodi Quas and Robyn Fivush (eds.)

*Memory and Emotion* Daniel Reisberg and Paula Hertel (eds.)

*Emotion Explained* Edmund T. Rolls

*Emotion, Social Relationships, and Health* Carol D. Ryff and Burton Singer (eds.)

*Oxford Companion to Emotion and the Affective Sciences* David Sander and Klaus Scherer

*A Blueprint for Affective Computing: A sourcebook and manual* Klaus R. Scherer, Tanja Bänzinger, and Etienne Roesch

*Appraisal Processes in Emotion: Theory, Methods, Research* K. Scherer, A. Schorr, and T. Johnstone (eds.)

*Bodily Sensibility: Intelligent Action* Jay Schulkin

*Boo! Culture, Experience, and the Startle Reflex* Ronald C. Simons

*Thinking and Feeling: Contemporary Philosophers on Emotions* Robert C. Solomon

# Components of Emotional Meaning

## A sourcebook

Edited by

Johnny J.R. Fontaine

Klaus R. Scherer

Cristina Soriano

**OXFORD**  
UNIVERSITY PRESS

OXFORD  
UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP,  
United Kingdom

Oxford University Press is a department of the University of Oxford.  
It furthers the University's objective of excellence in research, scholarship,  
and education by publishing worldwide. Oxford is a registered trade mark of  
Oxford University Press in the UK and in certain other countries

© Oxford University Press 2013

The moral rights of the authors have been asserted

First Edition published in 2013

Impression: 1

All rights reserved. No part of this publication may be reproduced, stored in  
a retrieval system, or transmitted, in any form or by any means, without the  
prior permission in writing of Oxford University Press, or as expressly permitted  
by law, by licence or under terms agreed with the appropriate reprographics  
rights organization. Enquiries concerning reproduction outside the scope of the  
above should be sent to the Rights Department, Oxford University Press, at the  
address above

You must not circulate this work in any other form  
and you must impose this same condition on any acquirer

Published in the United States of America by Oxford University Press  
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data  
Data available

Library of Congress Control Number: 2013938573

ISBN 978-0-19-959274-6

Printed and bound by  
CPI Group (UK) Ltd, Croydon, CR0 4YY

Oxford University Press makes no representation, express or implied, that the  
drug dosages in this book are correct. Readers must therefore always check  
the product information and clinical procedures with the most up-to-date  
published product information and data sheets provided by the manufacturers  
and the most recent codes of conduct and safety regulations. The authors and  
the publishers do not accept responsibility or legal liability for any errors in the  
text or for the misuse or misapplication of material in this work. Except where  
otherwise stated, drug dosages and recommendations are for the non-pregnant  
adult who is not breast-feeding

Links to third party websites are provided by Oxford in good faith and  
for information only. Oxford disclaims any responsibility for the materials  
contained in any third party website referenced in this work.

## Preface

Klaus R. Scherer

The idea that gave rise to the research reported in this book is, as is often the case in science, due largely to serendipity and chance events. However, as is also frequently the case, the time had to be ripe for serendipity to play its role. What had slowly ripened as the idea was born was the conviction that emotion was best defined as an episode during which different subsystems of the organism are tightly coordinated (and can thus be considered as *components* of emotion) in order to allow optimal adaptation to environmental contingencies. This definition emerged during the development of a new breed of appraisal theories (following the pioneering work of Arnold and Lazarus; see Schorr, 2001), as the theorists in this tradition converged on the claim that emotions were to be seen as processes that are elicited and differentiated by the appraisal of relevant events (see Scherer, 1999a, 2005a). This influential theoretical development occurred at a time when a group of European emotion researchers created, with the help of the Maison des Sciences de l'Homme in Paris and its director, Clemens Heller, a consortium of their laboratories, designed to facilitate collaboration on different projects and jointly train their young researchers. During one of the meetings of the consortium, I happened to discuss the thorny issue of emotion labels and the differences between languages (an issue which is directly related to the question of how many emotions are distinguished in different languages and cultures, and what counts as a "real" emotion) with Nico Frijda. Both of us had an inkling that the key to the question might have to do with the fact that different emotion labels (especially across languages) reflect the different components of emotion, as postulated by both of us, to a different degree. For example, some words seem to focus on the cognitive appraisal configuration that gives rise to an emotion (e.g., irritation), whereas others might focus more on physiological manifestations, expressions, or action tendencies (e.g., rage). This led to the idea that this approach might provide a royal road to defining and potentially measuring the meaning of emotion words in different languages.

Like many good ideas that are generated while drinking wine, this one was not immediately pursued, as other priorities determined our research agendas. But, also like other good ideas, this one lingered in my mind and I decided to pursue the goal of measuring the meaning of emotion words empirically via component ratings in a cross-cultural and cross-language setting. I had been encouraged in this by the success of a large cross-cultural study on the self-report of emotion experiences (ISEAR, Scherer & Wallbott, 1994) and of an expert system allowing the differentiation of emotion (GENESE, Scherer, 1993), which had demonstrated the feasibility of differentially assessing the different emotion components through self-report. Having generated the idea of an empirical study, I published the first formal proposal for this work (Scherer, 2005a), suggesting the use of a design feature approach to create a *grid* of features and emotions. This proposal included a first version of a profile of features for different components and a set of emotion words.

But a plan is not enough. It took a second chance event for it to be put into action. During a meeting on cross-cultural psychology in Budapest in 2003, an old friend, Ype Poortinga, introduced me to Johnny Fontaine, who had carried out a series of extremely interesting culture-comparison studies of emotion (Fontaine et al., 2006). Johnny came to visit our group in Geneva and we discovered a great deal of overlap in interests, as well as complementary skills and approaches, and

32347/9  
2294

decided to work together. In the meanwhile, we had received funding from the Swiss federal government to form a National Center of Competence in Research (NCCR) in the Affective Sciences (the Swiss Center for Affective Sciences). With the support of the NCCR and of the University of Geneva, we were able to found, with the help of Pierre Dassen, an International Consortium on Cross-Cultural Research on Affect to serve as an organizational framework for a "GRID study."

The ensuing research activity was greatly facilitated by a third happy coincidence, namely the presence of a competent cognitive scientist with extensive computer skills in our group, Etienne Roesch, and the collaboration with interested colleagues in the European HUMAINE (Human Machine Interaction and Emotion) network of excellence. The first version of the GRID questionnaire (via controlled web administration) was run in Geneva, Gent, and York/Belfast, and the results published by Fontaine, Scherer, Roesch, and Ellsworth (2007). The initial phase of the collaborative research was greatly enhanced by Phoebe Ellsworth's precious input, largely on the occasion of a cross-cultural psychology conference on the Greek island of Spetses in 2006, which also served as a launching pad for securing the collaboration of research teams from many different countries.

A final propitious event was the arrival of Cristina Soriano, a cognitive linguist who had worked on metaphoric expressions of emotion, as a consequence of our Center recruiting a postdoctoral fellow for an interdisciplinary research focus on Language and Culture. She organized the data collection with over 20 teams in as many countries and also enriched the conceptual and theoretical background of the study with pertinent input from linguistics.

Without these serendipitous and chance effects, neither the GRID research nor this book would exist. However, the most important factors for the success of this ambitious endeavor have been the competence, enthusiastic interest, and hard work of all those concerned, in particular the large number of collaborators in this intercultural study in over 25 countries and almost as many languages. Many of them are also co-authors of this book and have contributed to the data collection, several meetings and symposia, and the writing of the book in a truly interdisciplinary spirit. As one might imagine, the editorial process of bringing together contributions of scholars raised in very different scientific traditions was not an easy matter, especially given the fundamental differences between qualitative and quantitative approaches and different habits of establishing evidence. Despite these circumstances, the reviewing and resubmitting process went very smoothly, thanks to the interdisciplinary background of the editorial team and the strong spirit of cooperation on the part of the various groups of authors.

In concluding, I want to thank, in the name of the editors of this volume, all of the contributors to this ambitious research enterprise, including the collaborators who, for various reasons, could not write a chapter in this volume. Our special thanks go to Anna Ogarkova for recruiting many research collaborators for the Slavic language families and writing a chapter that makes a central contribution to the review of the literature and the theoretical foundation of the work reported in this volume. We also thank Etienne Roesch for programming the initial version of the GRID instrument, the technical staff of the NCCR (Natascha Michel, Urs Richle, Olivier Rosset and Julien Savary) who supported the smooth running of a multilingual questionnaire online, Christelle Gillioz and Samidh Shrestha for their help in manuscript preparation, and the staff at Oxford University Press for a stellar editing and publishing effort.

Last but not least, we very gratefully acknowledge the financial support from a number of institutions who have made this ambitious research and the preparation of this book possible: the Swiss National Science Foundation (SNSF), the Swiss Network for International Studies (SNIS), the Research Foundation Flanders (FWO), the University of Geneva, Ghent University, and the European Research Council (ERC).

Geneva, July 2013

## Contents

List of contributors *xi*

List of GRID collaborators *xiii*

General introduction: A paradigm for a multidisciplinary investigation of the meaning of emotion terms *1*

*J. J. R. Fontaine, K. R. Scherer, and C. Soriano*

### Part I **Disciplinary perspectives and theoretical approaches to the meaning of emotion words**

1 Measuring the meaning of emotion words: A domain-specific componential approach *7*

*K. R. Scherer*

2 Dimensional, basic emotion, and componential approaches to meaning in psychological emotion research *31*

*J. J. R. Fontaine*

3 Folk emotion concepts: Lexicalization of emotional experiences across languages and cultures *46*

*A. Ogarkova*

4 Linguistic theories of lexical meaning *63*

*C. Soriano*

### Part II **The GRID instrument: Hypotheses, operationalization, data, and overall structure**

5 The why, the what, and the how of the GRID instrument *83*

*J. J. R. Fontaine, K. R. Scherer, and C. Soriano*

6 Cross-cultural data collection with the GRID instrument *98*

*C. Soriano, J. J. R. Fontaine, K. R. Scherer, and GRID collaborators*

7 The global meaning structure of the emotion domain: Investigating the complementarity of multiple perspectives on meaning *106*

*J. J. R. Fontaine and K. R. Scherer*

### PART III **Decomposing the meaning of emotion terms: Analysis by emotion component**

8 From emotion to feeling: The internal structure of the Feeling component *129*

*J. J. R. Fontaine and K. R. Scherer*

- 9 Embodied emotions: The Bodily reaction component 149  
*K. R. Scherer and J. J. R. Fontaine*
- 10 The “mirror of the soul”: The Expression component 156  
*K. R. Scherer and J. J. R. Fontaine*
- 11 Emotion is for doing: The Action tendency component 170  
*J. J. R. Fontaine and K. R. Scherer*
- 12 Driving the emotion process: The Appraisal component 186  
*K. R. Scherer and J. J. R. Fontaine*
- 13 The meaning structure of emotion terms: Integration across components 210  
*K. R. Scherer and J. J. R. Fontaine*

#### PART IV Psychological perspectives

- 14 The new NOVELTY dimension: Method artifact or basic dimension in the cognitive structure of the emotion domain? 233  
*J. J. R. Fontaine and E. Veirman*
- 15 From meaning to experience: The dimensional structure of emotional experiences 243  
*J. J. R. Fontaine, E. Veirman, and H. Groenvynck*
- 16 Reviving a forgotten dimension—potency in affective neuroscience 261  
*A. Schacht*
- 17 Maggots and morals: Physical disgust is to fear as moral disgust is to anger 271  
*S. W. S. Lee and P. C. Ellsworth*
- 18 The GRID meets the Wheel: Assessing emotional feeling via self-report 281  
*K. R. Scherer, V. Shuman, J. J. R. Fontaine, and C. Soriano*
- 19 Assessing interindividual differences in emotion knowledge: Exploring a GRID-based approach 299  
*S. J. E. Van den Eede and J. J. R. Fontaine*

#### PART V Cultural-comparative perspectives

- 20 The conceptualization of despair in Basque, Spanish, and English 311  
*I. Alonso-Arbiol, C. Soriano, and F. J. R. van de Vijver*
- 21 Finno-Ugric emotions: The meaning of anger in Estonian and Finnish 328  
*A. Realo, M. Siitoinen, H. Tissari, and L. Kõõts-Ausmees*
- 22 Types of anger in Spanish and Russian 339  
*C. Soriano, J. J. R. Fontaine, A. Ogarkova, C. Mejía Quijano, Y. Volkova, S. Ionova, and V. Shakhovskyy*
- 23 What the GRID can reveal about culture-specific emotion concepts: A case study of Russian “toska” 353  
*A. Ogarkova, J. J. R. Fontaine, and I. Prihod’ko*
- 24 Pride is not created equal: Variations between Northern and Southern Italy 366  
*M. Mortillaro, P. E. Ricci-Bitti, G. Bellelli, and D. Galati*

- 25 The meaning of pride across cultures 377  
*Y. M. J. van Osch, S. M. Breugelmans, M. Zeelenberg, and J. J. R. Fontaine*
- 26 Cultural differences in the meaning of guilt and shame 388  
*M. Silfver-Kuhlampi, J. J. R. Fontaine, L. Dillen, and K. R. Scherer*

#### PART VI Linguistic perspectives

- 27 Comparing the Natural Semantic Metalanguage (NSM) approach to emotion and the GRID paradigm 399  
*Z. Ye*
- 28 Conceptual Metaphor Theory and the GRID paradigm in the study of anger in English and Spanish 410  
*C. Soriano*
- 29 English “fear” and Polish “strach” in contrast: The GRID paradigm and the Cognitive Corpus Linguistic methodology 425  
*B. Lewandowska-Tomaszczyk, P. A. Wilson, and Y. Niiya*
- 30 Triangulating the GRID: A corpus-based cognitive linguistic analysis of five Greek emotion terms 437  
*M. Terkourafi, E. C. Kapnoula, P. Panagiotopoulou, and A. Protopapas*

#### PART VII Special topics

- 31 The GRID study in India 451  
*A. Hejmadi*
- 32 Adaptation of the GRID instrument in Setswana 455  
*C. Jonker, L. Mojaki, D. Meiring, and J. J. R. Fontaine*
- 33 Comparison of the AROUSAL dimension in Turkey and the USA 462  
*G. A. Akırmak, D. Sunar, and H. B. Boratav*
- 34 Familiarity and disappointment: A culture-specific dimension of emotional experience in Greece? 467  
*P. Panagiotopoulou, M. Terkourafi, and A. Protopapas*
- 35 The meaning of happiness in Japan and the United States 473  
*K. Ishii*
- 36 Happiness and contentment in English and Polish 477  
*P. A. Wilson, B. Lewandowska-Tomaszczyk, and Y. Niiya*
- 37 Exploring the meaning of pride and shame in Hong Kong-Chinese 482  
*S. Wong and D. Y. Yeung*
- 38 The meaning of Dutch “schaamte” as a single term for shame and embarrassment 486  
*Y. M. J. van Osch, S. M. Breugelmans, and M. Zeelenberg*
- 39 Emotion term semantics in Russian–Ukrainian and Ukrainian–Russian bilinguals 490  
*A. Ogarkova, I. Prihod’ko, and J. Zakharova*

- 40 The vocal expression component in the meanings of Russian, Ukrainian, and US English emotion terms 496  
*J. Zakharova and A. Ogarkova*
- 41 Language family similarity effect: Emotion term semantics in Russian, Ukrainian, Czech, Slovak, and Polish 502  
*A. Ogarkova, N. Panasenko, and B. Lewandowska-Tomaszczyk*
- 42 Cognitive appraisals can differentiate positive emotions: The role of social appraisals 507  
*E. M. W. Tong*
- 43 Where do emotional dialects come from? A comparison of the understanding of emotion terms between Gabon and Quebec 512  
*U. Hess, P. Thibault, and M. Levesque*

## PART VIII Taking stock and further development of the GRID paradigm

- 44 CoreGRID and MiniGRID: Development and validation of two short versions of the GRID instrument 523  
*K. R. Scherer, J. J. R. Fontaine, and C. Soriano*
- 45 Promises delivered, future opportunities, and challenges for the GRID paradigm 542  
*J. J. R. Fontaine, K. R. Scherer, and C. Soriano*
- Appendix 1 (Availability) 561
- Appendix 2 (GRID instrument) 562
- Appendix 3 (CoreGRID instrument) 570
- Appendix 4 (MiniGRID instrument) 575
- Appendix 5 (MiniGRID instrument – paper version) 577
- References 578
- Name index 631
- Subject index 641

## List of contributors

**Gülcan Akçalan Akırmak**  
Istanbul Bilgi University (Turkey)

**Paola Alarcón**  
University of Concepción (Chile)

**Itziar Alonso-Arbiol**  
University of the Basque Country UPV/EHU (Spain)

**Guglielmo Bellelli**  
University of Bari (Italy)

**Hale Bolak Boratav**  
Istanbul Bilgi University (Turkey)

**Seger M. Breugelmans**  
Tilburg University (The Netherlands)

**Cecilia Chau Pérez-Aranibar**  
Pontificia Universidad Católica del Perú (Peru)

**Let Dillen**  
Ghent University (Belgium)

**Michael Eid**  
Free University of Berlin (Germany)

**Phoebe Ellsworth**  
University of Michigan (USA)

**Johnny J. R. Fontaine**  
Ghent University (Belgium)

**Dario Galati**  
University of Turin (Italy)

**Hans Groenvynck**  
Ghent University (Belgium)

**Shlomo Hareli**  
University of Haifa (Israel)

**Ahalya Hejmadi**  
University of Maryland (USA) & Utkal University (India)

**Ursula Hess**  
Humboldt University (Germany)

**Svetlana Ionova**  
Volgograd State University (Russia)

**Keiko Ishii**  
Kobe University (Japan)

**Cara Jonker**  
North-West University (South-Africa)

**Efthymia C. Kapnoula**  
University of Iowa (USA)

**Liisi Kõöts-Ausmees**  
University of Tartu (Estonia)

**Spike W. S. Lee**  
University of Toronto (Canada)

**Manon Levesque**  
Omar Bongo University (Gabon)

**Barbara Lewandowska-Tomaszczyk**  
University of Łódź (Poland)

**Deon Meiring**  
University of Pretoria (South-Africa)

**Claudia Mejía Quijano**  
University of Antioquia (Colombia)

**Lerato Mojaki**  
North-West University (South-Africa)

**Marcello Mortillaro**  
Swiss Center for Affective Sciences—University of Geneva (Switzerland)

**Yu Niiya**  
Hosei University (Japan)

**Anna Ogarkova**  
Swiss Center for Affective Sciences—University of Geneva (Switzerland)

**Penny Panagiotopoulou**  
University of Patras (Greece)

**Nataliya Panasenko**  
University of SS Cyril and Methodius in Trnava (Slovakia) – Kiev National Linguistic University (Ukraine)

**Irina Prihod'ko**

Kyiv National Taras Shevchenko University  
(Ukraine)

**Athanassios Protopapas**

University of Athens (Greece)

**Anu Realo**

University of Tartu (Estonia)

**Pio E. Ricci-Bitti**

University of Bologna (Italy)

**Annekathrin Schacht**

University of Göttingen (Germany)

**Klaus R. Scherer**

Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Viktor Shakhovskiy**

Volgograd Socio-Pedagogical University  
(Russia)

**Yuh-Ling Shen**

National Chung Cheng University  
(Taiwan)

**Ching-Fan Sheu**

National Cheng Kung University (Taiwan)

**Vera Shuman**

University of Lausanne (Switzerland)

**Mari Siirainen**

University of Helsinki (Finland)

**Mia Silfver-Kuhalampi**

University of Helsinki (Finland)

**Cristina Soriano**

Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Diane Sunar**

Istanbul Bilgi University (Turkey)

**Marina Terkourafi**

University of Illinois at Urbana-Champaign  
(USA)

**Pascal Thibault**

Cégep Saint-Jean-sur-Richelieu (Canada)

**Heli Tissari**

University of Helsinki (Finland)

**Eddie M. W. Tong**

National University of Singapore  
(Singapore)

**Fons J. R. van de Vijver**

Tilburg University (The Netherlands),  
North-West University (South Africa),  
& University of Queensland (Australia)

**Steven J. E. Van den Eede**

Ghent University (Belgium)

**Yvette van Osch**

Tilburg University (The Netherlands)

**Elke Veirman**

Ghent University (Belgium)

**Yana Volkova**

Volgograd Socio-Pedagogical University  
(Russia)

**Paul A. Wilson**

University of Łódź (Poland)

**Sowan Wong**

City University of Hong Kong (China)

**Zhengdao Ye**

The Australian National University  
(Australia)

**Dannii Y. Yeung**

City University of Hong Kong (China)

**Julia Zakharova**

Internal Affairs Ministry Academy  
(Ukraine)

**Marcel Zeelenberg**

Tilburg University (The Netherlands)

**Aïda Zitouni**

University of Jendouba (Tunisia)

# List of GRID collaborators (dataset owners)<sup>1</sup>

**Gülcan Akçalan Akırmak**

Istanbul Bilgi University (Turkey)

**Paola Alarcón**

University of Concepción (Chile)

**Itziar Alonso-Arbiol**

University of the Basque Country UPV/EHU  
(Spain)

**Guglielmo Bellelli**

University of Bari (Italy)

**Cecilia Chau Pérez-Aranibar**

Pontificia Universidad Católica del Perú (Peru)

**Joana Dimas**

INESC-ID and Instituto Superior Técnico,  
Universidade Técnica de Lisboa (Portugal)

**Michael Eid**

Free University of Berlin (Germany)

**Phoebe Ellsworth**

University of Michigan (USA)

**Johnny J. R. Fontaine**

Ghent University (Belgium)

**Dario Galati**

University of Turin (Italy)

**Shlomo Hareli**

University of Haifa (Israel)

**Ahalya Hejmadi**

University of Maryland (USA) & Utkal  
University (India)

**Ursula Hess**

Humboldt University (Germany)

**Keiko Ishii**

Kobe University (Japan)

**Cara Jonker**

North-West University (South-Africa)

**Zoltan Kövecses**

Eötvös Loránd University (Hungary)

**Barbara Lewandowska-Tomaszczyk**

University of Łódź (Poland)

**Deon Meiring**

University of Pretoria (South-Africa)

**Marcello Mortillaro**

Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Yu Niiya**

Hosei University (Japan)

**Anna Ogarkova**

Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Marina Palazova**

International Psychoanalytic University Berlin  
(Germany)

**Nataliya Panasenکو**

University of SS Cyril and Methodius in  
Trnava (Slovakia)—Kiev National Linguistic  
University (Ukraine)

**Hu Ping**

Renmin University of China (China)

**Athanassios Protopapas**

University of Athens (Greece)

<sup>1</sup> Contact information for all GRID collaborators is available on the GRID website at <http://www.affective-sciences.org/GRID>

**Anu Realo**  
University of Tartu (Estonia)

**Pio E. Ricci-Bitti**  
University of Bologna (Italy)

**Klaus R. Scherer**  
Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Yuh-Ling Shen**  
National Chung Cheng University (Taiwan)

**Ching-Fan Sheu**  
National Cheng Kung University (Taiwan)

**Mari Siirinen**  
University of Helsinki (Finland)

**Cristina Soriano**  
Swiss Center for Affective Sciences—  
University of Geneva (Switzerland)

**Diane Sunar**  
Istanbul Bilgi University (Turkey)

**Heli Tissari**  
University of Helsinki (Finland)

**Eddie M. W. Tong**  
National University of Singapore  
(Singapore)

**Yvette van Osch**  
Tilburg University (The Netherlands)

**Sowan Wong**  
City University of Hong Kong (China)

**Dannii Y. Yeung**  
City University of Hong Kong (China)

**Aïda Zitouni**  
University of Jendouba (Tunisia)

## General introduction: A paradigm for a multidisciplinary investigation of the meaning of emotion terms

Johnny J. R. Fontaine, Klaus R. Scherer,  
and Cristina Soriano

Understanding the meaning of emotion terms is a shared interest across the different disciplines that study emotions, such as psychology, linguistics, cultural anthropology, sociology, history, and multidisciplinary cross-cultural research.

It goes without saying that emotion words play a central role in psychological emotion research. Frequently emotion words are used directly as stimuli or indirectly as response scales. But even when no emotion words are used, the stimuli have often been selected on the basis of ratings by experts on emotion words. An implication of this widespread direct and indirect use of emotion terms is that the results of most psychological emotion research depend on the meaning of the terms used. This dependence is often overlooked. It is implicitly assumed that people react to the meaning of emotion words just as intended by the emotion researcher. However, this assumption is highly problematic because emotions can be defined by focusing on different psychological phenomena, including well-observable facial and vocal expressions, overt bodily reactions, as well as internal changes in motivational orientation that might or might not translate into observable behavior.

Comparative research between cultures in psychology, sociology, and anthropology has shown many cultural and linguistic specificities in the respective emotion lexica. When they go unnoticed, these specificities may bias cross-cultural emotion research, especially as English is generally used as the source or reference language in these studies. Moreover, some theorists claim that emotions are culturally constructed phenomena that fundamentally differ between cultural groups. According to this constructivist account, emotion words represent the result of this conceptualization process and they play a key role in passing on these culturally specific constructions.

Several linguistic research traditions focus on what emotion terms mean. Some traditions decompose the meaning of words into basic semantic features, whereas others look at the figurative uses of those words, and still others analyze the lexico-grammatical contexts in which emotion terms appear, in an attempt to define their meaning by looking at the company the words keep. In all of these cases, linguists try to derive the meaning of emotion terms from an analysis of actual language use.

Understanding the meaning of emotion words is thus a cross-disciplinary concern. Unfortunately, there is little exchange between the different disciplines involved. While they deal with the same problems at a conceptual level, their theoretical and methodological approaches are often so diverse that a fruitful exchange seems impossible. The present book reports a project that aims to



create an instrument (the “GRID”) to study the meaning of emotion terms jointly from psychological, cultural comparative, and linguistic perspectives, encouraging a genuine exchange between these different disciplines and the different theoretical approaches within them. The GRID project is presented here in eight parts.

### Part I. **Disciplinary perspectives and theoretical approaches to the meaning of emotion words**

The first part of the volume presents the disciplinary perspectives and the theoretical approaches in which the development of the instrument has been embedded. In the first chapter, the componential approach to emotion definition, represented by the Component Process Model (CPM, Scherer 2001, 2005a), is presented (Chapter 1). The CPM, which forms the basis for the development of the GRID instrument, postulates that emotions are processes triggered by goal-relevant events and consist of synchronized activity in several human subsystems (cognitive appraisal, action tendencies, bodily reactions, expression, and feeling) in order to prepare the person for rapid action. Although the CPM represents only one theoretical account of emotion processes in psychology, it lends itself to developing an instrument for multidisciplinary use. Its integrative orientation and its open, dynamic architecture make it suitable to address the issues raised by very different theoretical approaches in the relevant disciplines. The remaining chapters present systematic overviews of the major issues and theoretical models put forward from psychological (Chapter 2), cultural-comparative (Chapter 3), and linguistic perspectives (Chapter 4) in the study of emotion words.

### Part II. **The GRID instrument: Hypotheses, operationalization, data, and overall structure**

The second part of the volume describes the construction, data collection, and overall results obtained with the new instrument. This instrument is called the GRID because it simply consists of a grid of 24 commonly used emotion terms and 142 features that refer to cognitive appraisals, bodily reactions, expressions, feelings, and action tendencies that potentially define emotion terms. The GRID instrument measures the perceived probability of each of these features to substantially contribute to the meaning of a given emotion word. The first chapter in this part (Chapter 5) describes and justifies the central hypotheses and related questions generated by the CPM and by other work in the psychological, cultural-comparative, and linguistic perspectives on emotion outlined in the first part of the volume. The chapter also provides an overview of the procedures that have been chosen for data analysis. The second chapter (Chapter 6) provides a detailed description of the extensive cross-cultural data collection with the GRID instrument. The final chapter in this part (Chapter 7) presents an overall analysis of the data with respect to the internal meaning structure of the emotion domain spanned by 24 major emotion terms, as measured by the GRID instrument, and examines the compatibility of this structure with componential, categorical, and dimensional approaches to the study of emotion.

### Part III. **Decomposing the meaning of emotion terms: Analysis by emotion component**

The third part of the book focuses on the separate emotion components. In the GRID instrument, each of the five emotion components has been operationalized by one or more major theories. The contribution of each of the individual emotion components to the meaning of

emotion terms is investigated and discussed step by step in five chapters dealing with one component each: Feeling (Chapter 8), Bodily reaction (Chapter 9), Expression (Chapter 10), Action tendency (Chapter 11), and Appraisal (Chapter 12). A final chapter attempts to integrate the results across components (Chapter 13).

### Part IV. **Psychological perspectives**

The fourth part of the book further reports different subanalyses of the GRID dataset from a psychological perspective. The replicability and relevance of the overall structure identified by the GRID instrument is investigated with different psychological (Chapters 14 and 15) and neuroscientific methods (Chapter 16). Moreover, this part demonstrates that the GRID instrument can be used to define the meaning of specific emotions (Chapter 17) and how it can contribute to the construction of theoretically well-grounded psychological assessment instruments in the emotion domain (Chapters 18 and 19).

### Part V. **Cultural-comparative perspectives**

The fifth part of the book presents the use of the GRID instrument for cultural and linguistic comparative purposes. This part demonstrates how similarities and differences in the meaning of emotion terms between two or more cultural/linguistic groups can be identified with the GRID instrument (Chapters 20–22 and 24–26) and how the GRID instrument can be used to clarify the meaning of language-specific emotion terms (Chapter 23).

### Part VI. **Linguistic perspectives**

In the sixth part, the GRID methodology is compared with approaches classically used in the linguistic analysis of the meaning of emotion words, namely the Natural Semantic Metalanguage approach (Chapter 27), the Conceptual Metaphor approach (Chapter 28), and the Cognitive Corpus Linguistic approach (Chapters 29 and 30).

### Part VII. **Special topics**

The seventh part of this volume consists of short, focused chapters on specific topics proposed by collaborators of the GRID project. These issues concern the challenge of applying the GRID instrument in non-Western groups with little experience in web-based testing (Chapter 32), the country-specific findings on the meaning structure of emotion terms (Chapters 31, 33–38, and 41), and the exploration of promising research avenues in which the GRID can be applied (Chapters 39, 40, 42, 43).

### Part VIII. **Taking stock and further development of the GRID paradigm**

The last part of this book starts by presenting two shortened versions of the GRID instrument available for future use, namely the CoreGRID and the MiniGRID (Chapter 44). The CoreGRID captures the essential information in each of the emotion components, but with less than half of the features of the original instrument (68 items). The MiniGRID assesses the overall structure of the emotion domain with 16 features. Finally, the book ends (Chapter 45) with a discussion of the insights generated by the GRID study for the main disciplines involved in the study of emotion

words and their various theoretical approaches, as well as with a reflection on future developments of the paradigm, pertinent for emotion research in each of these fields and theoretical approaches.

In conclusion, the GRID paradigm, and the associated research program, presented in this book are intended for researchers and scholars who consistently rely on everyday emotion terms in their work. Emotions are elusive phenomena as evidenced by the lack of convergent agreement among emotion researchers on how to define the class as a whole and individual members of the class. At the same time, emotion words from everyday language are continuously used to refer to these phenomena both in daily discourse and in scientific work—largely because there are few alternatives to describe the fuzzy multicomponential episodes they refer to. This volume advocates the use of profiles of features selected on the basis of a domain specific approach—treating emotion in terms of synchronized changes in major components—as a promising framework to approach these elusive phenomena in a systematic way.

## Part I

---

# **Disciplinary perspectives and theoretical approaches to the meaning of emotion words**