

Contents

Series Editor's Introduction	ix
1. Introduction: Carving Nature at Its Joints	1
2. Defining Nature's Joints: Alternative Meanings of Taxon	4
Commonsense Taxa	4
Causal Origin Taxa	5
Formal-Numerical Taxa	6
Misconceptions and Confusions About Taxonic Constructs	7
Bimodality Is Not Required	7
Taxonicity Is Not "Merely a Moderator Effect"	8
Taxonicity Does Not Preclude Dimensionality	9
Most Taxa Are Initially Specified by Imperfect Indicators	9
3. Mathematical Foundations of Multivariate Taxometrics	11
The General Covariance Mixture Theorem	11
Taxa as Regression Model Dummy Scores	15
MAXCOV-HITMAX	16
Locating the Hitmax	17
Estimating the Grand Base Rate and Indicator Validities	23
MAXCOV Consistency Tests and Model Corroboration	25
Allocating Individuals to Taxonic Classes	27

4.	MAXEIG-HITMAX: A Multivariate Generalization of MAXCOV	31
	Separating the Boys From the Girls	32
	Using MAXEIG to Separate the Boys From the Girls	40
	Constructing Overlapping Windows	41
	The Inchworm Consistency Test	45
5.	Factor-Analytic Techniques for Distinguishing Types From Continua: L-Mode	48
	Factor Analysis and Typological Factors	49
	Latent Profile Analysis and Factor Analysis	52
	Estimating the Parameters of the General Covariance Mixture Theorem With Factor Analysis	55
	L-Mode	56
	A Monte Carlo Comparison of L-Mode and Two Cluster Analysis Methods	60
6.	Factor-Analytic Techniques for Distinguishing Types From Continua: Q-Factor Analysis	73
	The Example Data Set	74
	An L-Mode Analysis of the Dissociation Data	76
	A Q-Factor Analysis of the Dissociation Data	79
	Measuring Profile Similarity with D^2	83
	Recovering Level Taxa With Q-Factor Analysis	87
7.	Taxometrics in Scientific Methodology	92
	Guidelines for Corroborating Taxonic Models	92
	Assessing Scientific Theories	93
	Riskiness via Numerically Precise Predictions	95
	Numerical Predictions in Taxometrics	97
	Appendix A: The Effect of Nuisance Covariance on L-Mode Parameter Estimates	103
	Appendix B	108
	MAXCOV	108
	SCORMAX	116
	COMB	121
	Appendix C: MAXEIG-HITMAX	123
	Appendix D: L-Mode	127
	References	133
	Author Index	141
	Subject Index	145
	About the Authors	149