

Contents

Tables, Figures, and Boxes xiv

Preface xviii

Acknowledgments xxi

1 Introduction 1

Why Intelligence Fails 1

Failure to Share Information 3

Failure to Analyze Collected Material Objectively 4

Failure of the Customer to Act on Intelligence 5

What the Book Is About 6

Summary 7

Notes 8

2 Intelligence in Twenty-First-Century Conflict 10

Nature of Twenty-First-Century Conflict 11

Networks 11

Nonstate Actors 12

Tools of Conflict 14

Diplomatic 14

Information 14

Military 15

Economic 15

Synergy of the Tools 16

The Conflict Spectrum 17

Prevent 17

Deter 18

Prevail 18

The Function of Intelligence 19

The Nature of Intelligence 19

Strategic Intelligence 20

Operational Intelligence 21

Tactical Intelligence 25

Summary 27

Notes 28

Part I The Analysis Process 29

3 The Intelligence Process 30

The Traditional Intelligence Cycle 31

Intelligence as a Target-Centric Process 34

The Target 39

The Target as a Complex System 39

The Target as a Network 40

Spatial and Temporal Attributes of the Target 44

Summary 45

Notes 46

4 Defining the Intelligence Issue 47

Statement of the Issue 48

The Issue Definition Product 50

Issue Decomposition 51

Complex Issue Decomposition 54

Structured Analytic Methodologies for Issue Definition 56

Brainstorming 56

Key Assumptions Check 57

Example: Defining the Counterintelligence Issue 57

Summary 59

Notes 59

5 Conceptual Frameworks for Intelligence Analysis 61

Analytic Perspectives—PMESII 61

Modeling the Intelligence Target 63

The Concept of a Model 65

Using Target Models for Analysis 68

Modeling Using PMESII 70

Political Model 70

Military Model 71

Economic Model 72

Social Model 72

Infrastructure Model 73

Information Model 73

Using Models in Analysis 74

Targets 76

Operations 77

Linkages 77

Summary 78

Notes 79

6 Overview of Models in Intelligence 80

- Creating a Conceptual Model 80
- Textual Models 81
 - Lists 81
 - Comparative Models 82
 - Profiles 83
 - Interaction Matrices 85
- Mathematical Models 86
 - Spreadsheets 87
 - Simulation Models 87
- Visual Models 87
 - Charts and Graphs 87
 - Pattern Models 89
- Advanced Target Models 90
 - Systems Models 91
 - Relationship Models 91
 - Spatial and Temporal Models 92
 - Scenarios 93
- Target Model Combinations 93
 - Submodels 94
 - Collateral Models 94
- Alternative and Competitive Target Models 97
 - Alternative Models 97
 - Competitive Models 99
- Summary 100
- Notes 101

7 Creating the Model 102

- Existing Intelligence 103
- Sources of New Raw Intelligence 103
- Evaluating Evidence 106
 - Evaluating the Source 108
 - Evaluating the Communications Channel 110
 - Evaluating the Credentials of Evidence 113
 - Pitfalls in Evaluating Evidence 116
- Combining Evidence 123
 - Convergent and Divergent Evidence 123
 - Redundant Evidence 123
 - Formal Methods for Combining Evidence 124
- Structured Argumentation 125
 - Wigmore's Charting Method 125
 - Bayesian Techniques for Combining Evidence 126

	A Note about the Role of Information Technology	128
	Summary	130
	Notes	131
8	Denial, Deception, and Signaling	133
	Denial	133
	Deception	134
	Defense against Denial and Deception: Protecting Intelligence	
	Sources and Methods	135
	Higher Level Denial and Deception	137
	The Man Who Never Was	137
	Operation Fortitude	138
	The Cuban Missile Crisis	138
	The Farewell Dossier	140
	Rabta	141
	The Indian Nuclear Test	141
	Countering Denial and Deception	143
	Collection Rules	144
	The Information Instrument	146
	Signaling	146
	Analytic Tradecraft in a World of Denial and Deception	149
	Summary	150
	Notes	151
9	Systems Modeling and Analysis	152
	Analyzing an Existing System: The Mujahedeen Insurgency	152
	Analyzing a Developmental System: Methodology	153
	Performance	155
	Comparative Modeling	155
	Simulation	158
	The Mirror-Imaging Challenge	160
	Schedule	161
	Process Models	162
	The Technology Factor	167
	Risk	168
	Cost	170
	Operations Research	171
	Linear Programming	172
	Network Analysis	173
	Summary	174
	Notes	174
10	Network Modeling and Analysis	176
	Link Models	177
	Network Models	179

Some Network Types	180
Social Networks	180
Organizational Networks	181
Commercial Networks	181
Financial Networks	181
Threat Networks	182
Other Network Views	183
Modeling the Network	184
Manual Modeling	184
Computer-Assisted and Automated Modeling	184
Analyzing the Network	185
Nodal Analysis	186
Social Network Analysis	186
Organizational Network Analysis	190
Threat Network Analysis	191
Target Network Analysis	192
Automating the Analysis	193
Summary	193
Notes	194
11 Geospatial and Temporal Modeling and Analysis	196
Static Geospatial Models	198
Human Terrain Modeling	199
The Tools of Human Terrain Modeling	203
Temporal Models	203
Timelines	203
Pattern-of-Life Modeling and Analysis	206
Dynamic Geospatial Models	206
Movement Intelligence	207
Activity-Based Intelligence	208
Geographic Profiling	210
Intelligence Enigmas	210
Summary	212
Notes	213
Part II The Estimative Process	215
12 Predictive Analysis	216
Introduction to Predictive Analysis	217
Convergent and Divergent Phenomena	217
The Estimative Approach	220
High-Impact/Low-Probability Analysis	224
Extrapolation	226
Projection	230
Forecasting	238

Summary	242
Notes	243
13 Estimative Forces	245
Inertia	247
Countervailing Forces	249
Contamination	250
Synergy	252
Feedback	254
Strength	256
Time Delay	256
Unintended Consequences	257
Summary	259
Notes	260
14 Scenarios	261
Why Use Scenarios?	261
Types of Scenarios	262
Demonstration Scenario	263
Driving-Force Scenario	263
System-Change Scenario	264
Slice-of-Time Scenario	264
Scenario Perspectives	264
How to Construct Scenarios	265
1. Define the Problem	265
2. Identify Factors Bearing on the Problem	265
3. Identify Possible Solutions	267
4. Find the Best (Most Likely) Solution(s)	269
Indicators and the Role of Intelligence	270
A Scenario Exercise: The Global Information Environment in 2020	271
Summary	273
Notes	274
15 Simulation Modeling	275
Types of Simulations	275
Creating and Running a Simulation	276
Formulate the Issue	276
Identify the Needed Input Information	277
Select the Simulation Software	277
Develop a Valid Model	277
Run the Simulation and Interpret the Results	278
Simulations Used in Intelligence Analysis	278
Economic Simulations	278
Weapons Systems Simulations	280

Military Simulations	280
Network Simulations	281
Geospatial Simulations	281
Political and Social Simulations	282
Decision Modeling and Simulation	283
Rational Models	283
Administrative Models	285
Cultural Models	285
Emotional Models	286
Collective Decision-Making Models	287
Game Theory	288
Checking the Decision Model: Red Team Analysis	290
Summary	290
Notes	291

Part III Systems and Network Views of Analysis 293

16 A Systems View: Function	294
Intelligence Research	294
Current Intelligence	295
Indications and Warning	295
What Should an Intelligence Unit Produce?	298
Limits and Boundaries	300
Limits	300
Boundaries	302
The Pathology of Failures	304
Pressures	305
Denial and Deception	308
Customer Disregard and Misuse	309
The Perils of Being Too Rational	310
Summary	311
Notes	312
17 A Systems View: Process	314
Identifying the Customer	314
Planning the Analysis Project	315
Managing the Team Process	317
Guidelines for a Successful Team Effort	318
Guidelines for Collaboration	319
Collaborative Tools	320
Customer Relationships	320
Constraints on Sharing	321
Preparing the Analytic Product	322
Reviewing the Analytic Product	322
Evaluating the Analytic Product	323

Summary 324

Notes 325

18 A Systems View: Structure 326

Topical or Regional Structure? 326

The Analyst 328

Objectivity 328

Broad Perspective 329

Good Instincts 330

Recruiting and Developing Analysts 331

Analytic Teams 332

Organizing the Analysis Team 333

Ad Hoc Teams 335

Fusion Centers 335

Joint Intelligence Centers 337

Summary 337

Notes 338

19 A Network View: The Customer 339

Overview of Customers 339

Policymakers 341

Congress 344

Business Leaders 345

Military Leadership 346

Military Operations 346

Homeland Security 347

Law Enforcement 347

What All Customers Want 348

Analyst-Customer Interaction 349

Analyst as Communicator: Getting the Customer to
Understand the Message 350

Analyst as Advocate: Getting Buy-In 352

The Unique Defense Analysis Challenge 354

Summary 355

Notes 356

20 A Network View: The Collector 358

The U.S. Collection Management Challenge 359

Interrelating the Issue and Target Model 362

Identifying Gaps 365

Developing the Collection Strategy 367

Using Existing Collection Assets 367

Dealing with Networks 373

Dealing with Enigmas 373

Planning for Future Collection: Filling the Long-Term Gaps	374
Executing Collection Strategies	374
Summary	375
Notes	376

Appendix I: A Tale of Two NIEs 378

The Yugoslavia NIE	378
The Setting	379
First Draft: The "Muddle-Through" NIE	379
Second Draft: Force Field Analysis	381
The Customer View	382
The Iraqi Weapons of Mass Destruction NIE	382
Poor Issue Definition	383
Poor Evaluation of Sources and Evidence	384
Failure to Consider Alternative Target Models	385
Poor Analytic Methodology	386
Poor Interaction with Collectors and Customers	387
Notes	387

Appendix II: Example Project Plan 389

Issue Definition	389
Précis	390
Research Plan	390
Note	391

Appendix III: Presenting Analysis Results 392

Support Every Analytic Conclusion	392
Write or Brief with a Purpose	393
Separate Facts from Analysis	393
State the Facts	393
Analyze the Facts	393
Get to the Point	394
Write or Brief to Inform, Not to Impress	394
Make It Easy and Enjoyable to Read or Listen To	394
Write as You Would Talk	395
Avoid Acronyms	395
Use Graphics	395

Index 397

About the Author 423