CONTENTS

PREFACE .......................................................... ix

Part 1. The Basics

CHAPTER 1. INTRODUCTION TO PURE INDUCTIVE LOGIC .......... 3
CHAPTER 2. CONTEXT ............................................ 9
CHAPTER 3. PROBABILITY FUNCTIONS ............................. 11
CHAPTER 4. CONDITIONAL PROBABILITY ......................... 21
CHAPTER 5. THE DUTCH BOOK ARGUMENT ........................ 25
CHAPTER 6. SOME BASIC PRINCIPLES ............................. 33
CHAPTER 7. SPECIFYING PROBABILITY FUNCTIONS ............... 39

Part 2. Unary Pure Inductive Logic

CHAPTER 8. INTRODUCTION TO UNARY PURE INDUCTIVE LOGIC ...... 49
CHAPTER 9. DE FINETTI’S REPRESENTATION THEOREM ............... 55
CHAPTER 10. REGULARITY AND UNIVERSAL CERTAINTY ............. 61
CHAPTER 11. RELEVANCE ........................................ 69
CHAPTER 12. ASYMPTOTIC CONDITIONAL PROBABILITIES .......... 73
CHAPTER 13. THE CONDITIONALIZATION THEOREM ................. 81
CHAPTER 14. ATOM EXCHANGEABILITY ............................ 87
CHAPTER 15. REICHENBACH’S AXIOM ............................... 93
CHAPTER 16. CARNAP’S CONTINUUM OF INDUCTIVE METHODS ...... 99
CHAPTER 17. IRRELEVANCE .......................................103
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Another Continuum of Inductive Methods</td>
<td>125</td>
</tr>
<tr>
<td>19</td>
<td>The NP-Continuum</td>
<td>135</td>
</tr>
<tr>
<td>20</td>
<td>The Weak Irrelevance Principle</td>
<td>143</td>
</tr>
<tr>
<td>21</td>
<td>Equalities and Inequalities</td>
<td>155</td>
</tr>
<tr>
<td>22</td>
<td>Principles of Analogy</td>
<td>165</td>
</tr>
<tr>
<td>23</td>
<td>Unary Symmetry</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td><strong>Part 3. Polyadic Pure Inductive Logic</strong></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Introduction to Polyadic Pure Inductive Logic</td>
<td>181</td>
</tr>
<tr>
<td>25</td>
<td>Polyadic Constant Exchangeability</td>
<td>183</td>
</tr>
<tr>
<td>26</td>
<td>Polyadic Regularity</td>
<td>189</td>
</tr>
<tr>
<td>27</td>
<td>Spectrum Exchangeability</td>
<td>193</td>
</tr>
<tr>
<td>28</td>
<td>Conformity</td>
<td>199</td>
</tr>
<tr>
<td>29</td>
<td>The Probability Functions $u_{p,L}$</td>
<td>205</td>
</tr>
<tr>
<td>30</td>
<td>The Homogeneous/Heterogeneous Divide</td>
<td>213</td>
</tr>
<tr>
<td>31</td>
<td>Representation Theorems for $Sx$</td>
<td>223</td>
</tr>
<tr>
<td>32</td>
<td>Language Invariance with $Sx$</td>
<td>239</td>
</tr>
<tr>
<td>33</td>
<td>$Sx$ without Language Invariance</td>
<td>247</td>
</tr>
<tr>
<td>34</td>
<td>A General Representation Theorem for $Sx$</td>
<td>257</td>
</tr>
<tr>
<td>35</td>
<td>The Carnap-Stegmüller Principle</td>
<td>267</td>
</tr>
<tr>
<td>36</td>
<td>Instantial Relevance and $Sx$</td>
<td>269</td>
</tr>
<tr>
<td>37</td>
<td>Equality</td>
<td>275</td>
</tr>
<tr>
<td>38</td>
<td>The Polyadic Johnson’s Sufficientness Postulate</td>
<td>285</td>
</tr>
<tr>
<td>39</td>
<td>Polyadic Symmetry</td>
<td>291</td>
</tr>
<tr>
<td>40</td>
<td>Similarity</td>
<td>303</td>
</tr>
<tr>
<td>41</td>
<td>PIP and Atom Exchangeability</td>
<td>311</td>
</tr>
<tr>
<td>42</td>
<td>The Functions $u_{E}^{p,L}$</td>
<td>317</td>
</tr>
<tr>
<td>CONTENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>CHAPTER 43. LESS WELL TRAVELLED ROADS</td>
<td>323</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>327</td>
<td></td>
</tr>
<tr>
<td>INDEX</td>
<td>337</td>
<td></td>
</tr>
<tr>
<td>SYMBOLS AND ABBREVIATIONS</td>
<td>341</td>
<td></td>
</tr>
</tbody>
</table>