

HUMAN HEALTH AND ITS MAINTENANCE
WITH THE AID OF MEDICINAL PLANTS

HUMAN HEALTH AND ITS MAINTENANCE WITH THE AID OF MEDICINAL PLANTS

Julian Barker

*Fellow of the Linnean Society of London Fellow of the National Institute
of Medical Herbalists Member of the College of Practitioners of Phytotherapy*

AEON

First published in 2020 by
Aeon Books
PO Box 76401
London W5 9RG

Copyright © 2020 by Julian Barker

The right of Julian Barker to be identified as the author of this work has been asserted in accordance with §§ 77 and 78 of the Copyright Design and Patents Act 1988.

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, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

British Library Cataloguing in Publication Data

A C.I.P. for this book is available from the British Library

ISBN-13: 978-1-91280-760-4

Typeset by Medlar Publishing Solutions Pvt Ltd, India
Printed in Great Britain

www.aeonbooks.co.uk

*The primary responsibility of the practitioner
is to the health of the patient,
and not to the furtherance of herbal medicine,
to humanity not to ideology.
In gratitude to them I dedicate this work to my patients
without whom it could not have existed.
And also to my friend and mentor
Dr Jean-Claude Lapraz
but for whom my own trajectory would have taken a very different course.*

CONTENTS

<i>PREFACE</i>	<i>xxiii</i>
<i>THE ORGANISATION OF THE TEXT</i>	<i>xxvii</i>

PART ONE: POISE

<i>SECTION ONE: HEALTH: WHAT CAN WE MEAN?</i>	3
Definitions of health	3
Definition of health for the purposes of the current work	4
The scope and purpose of the model	5
The limitations of the model	6
Model of health in this current work	7
 <i>SECTION TWO: AXIOMS, THEOREMS AND IDEOLOGY</i>	 11
Split personalities	11
Personalities restored	14
Axioms	14
Human development	15
Mind, thoughts, conceptions	15
The sound of one hand clapping	16
There is no life without motion	17
There is no life without energy	18

SECTION THREE: THE BIOLOGICAL BASIS OF THE ADAPTIVE RESPONSE 21

Five crucial interlocking ideas 22

1/5: Mindedness 23

2/5: The interconnected matrices 25

3/5: Life as trajectory 28

Human drives as a function of time 30

4/5: Capacitance 32

5/5: The distribution of energy (maintenance of a ratio between
capacitance and adaptation) 33

Recapitulation of Section 3—The biological basis of the adaptive response 35

Some examples of accumulation and discharge. 40

The constant cycle of accumulation and discharge 41

The adaptive capacity. 42

Summary of common chronic conditions. 42

Footnote to Section 3: adaptive capacity is not a heritable trait 43

SECTION FOUR: POISE AS AN ECOLOGICAL APPROACH TO HEALTH 45

Parallel worlds 45

Binaries: the garden with forking paths 46

Circadian binaries and transition zones 46

Symmetry 47

Gaia's sister: the biosphere—separations and divisions 48

Things and events. 48

Boundary conditions 49

Bounded states 50

Where do we draw the line and with what do we draw it? 52

Essentialism. 54

Soil 55

Gaia's children: fauns and fauna 56

Separations and divisions 58

Fixation. 58

Oscillation 59

Fixation. 59

SECTION FIVE: THE TERRAIN: MIND AND MINDEDNESS 63

The necessity for a concept of terrain 65

Organisational structure 66

Structure and information. 69

The trajectory 70

Physiology as music 71

Anatomy and physiology in time 71

Resonance . . . . .	.72
Lines and penetrance . . . . .	.73
Rationality . . . . .	.73
Reason . . . . .	.74
Bipolarity . . . . .	.75
Facts and occasions. . . . .	.75
Things and events. . . . .	.76
The structure of the terrain . . . . .	.76
Stabilising the trajectory . . . . .	.77
Causality and scale: death and life . . . . .	.78
Mindedness in the structure of poise . . . . .	.79
The hypothalamic mind. . . . .	.80
Mindedness. . . . .	.81
Consciousness . . . . .	.81
Poise as stabiliser of the trajectory . . . . .	.82
The adaptors and regulators of poise . . . . .	.82
The analogic mind . . . . .	.87
Consciousness . . . . .	.88
A memory is always an abstraction . . . . .	.92
 <i>SECTION SIX: LIMITATIONS OF THEORY.</i>	 95
Escape from limitations . . . . .	.96
Time and drive . . . . .	.96
Rheology . . . . .	.96
Patterns and drivers . . . . .	.97
1. The hypothalamic–pituitary driver . . . . .	.97
2. Cholinergic and aminergic referees/regulators . . . . .	.99
3. Hypothalamic–posterior pituitary Intensifiers.	100
4. Organ responders and pacemakers.	100
Potential applications of theory	101
Configuration of the terrain within the human body.	101
Moravec’s paradox	102
The materialist defence	103
 <i>SECTION SEVEN: HEALTH AND POISE.</i>	 105
Some definitions of health	106
The calculus of poise	107
The tripos of human life.	108
State of the system	109
Intermission.	109

PART TWO: PEOPLE: WITHIN AND WITHOUT THE CLINIC

Preface to Part Two 113

SECTION EIGHT: PUBLIC HEALTH AND MEDICINE 117

The medical theoretician 118

Alternative medicine 119

Traditional medicine 120

What is the alternative to medicine? 121

SECTION NINE: THE CONSULTATION IN SOCIAL CONTEXT 125

The setting the speech the style the point the outcome 125

Whom do we treat? 126

The presentation 127

Classification of patients? 128

The Worried Well 130

Discomfort 131

Contrarians 131

Fugitives 133

Preaching to the converted 133

Consumer health-ists 133

Difficult patients 134

Self-defeating patients 135

Anxious patients 135

Common-sense pluralists 136

One-offs 136

Cost. 136

The functions of a physician 137

Good medicine 138

The great divide. 139

The cobbler's children go to school barefoot 139

Continuity and belonging 140

Style 141

Loyalty and power 142

Your own style 143

Fashion and style 143

The practice is organic 144

Could herbs help my husband? 145

SECTION TEN: STAGES IN THE CLINICAL PROCESS 147

The clinical process. 147

Observation precedes the physical examination 148

The consultation as data collection	149
Records	152
Stages in the process	152
Judgements	153
Advice	153
Assessment of the terrain from the history and examination.	154
The presentation of the patient	155
Time of day	157
<i>The circadian moment</i>	158
Our fractal histories.	158
<i>SECTION ELEVEN: CLINICAL EXAMINATION.</i>	161
The face.	162
Tongue, eye and pulse	163
The voice	164
Hair.	165
Chilly mortals.	165
Containment	166
Bodily cavities in the axial skeleton.	166
The musculoskeletal system.	167
Zoning	168
Human cartography.	168
<i>SECTION TWELVE: SYSTEMIC REVIEW.</i>	171
Sleep	173
Fatigue	174
Confusion.	174
Lungs and colon	175
Heart	175
Energy, Drive and fatiguability	176
Balance in the broadest sense.	176
Digestive system	178
Teeth	180
Renal or sifting system	180
Skin, hair and circulation	181
Hands, feet and circulation	182
Menstrual history	183
Asymmetric symptoms	185
Seasonal	186
Snap observations.	186

APPENDIX TO SECTIONS TEN, ELEVEN AND TWELVE:

RECOMMENDATIONS SHEETS. 189

Sheet 1. General recommendations towards helpful dietary habits 190

Sheet 2. Special recommendations towards reducing the provocation of *insulin*
 (as well as blood lipids) and reducing abdominal fat. 193

Sheet 3. Iron 196

Sheet 4. Daily breathing exercise 196

Sheet 5. Seasonal fasting 197

Sheet 6. GOUT and high levels of uric acid in the blood 198

SECTION THIRTEEN: PATTERNS OF LIFE. 205

Staging, cycling and timing 207

The primes of life 210

Integrity: comparing and contrasting 211

A chart of ages 212

Think of a number 213

Biorhythms 217

Biological time 218

Photosensitivity 222

Claims of sensitivity. 225

Meteoropathy and barometric sensitivity 226

Acoustic hypersensitivity 228

Biological time and infectious illness 229

Recovery time 229

Sleep 230

The parallel brains 230

Modules of sleep 231

The alternation between sleeping and feeding 233

Ratios 235

In summary 238

SECTION FOURTEEN: THE PATIENT AS PERSONALITY. 241

Four element theory. 242

Contemporary theories of personality. 243

Personality and age 247

The patient as personality. 248

Alternators 249

Alternators as a failure of circadian entrainment 250

Mental states 252

Mood swings 254

Mood stabilisation 255

Containment 256

Creativity	257
Promiscuity and paradoxical loyalty as a response to separation anxiety	258
Mental illness is always social illness	259
Attachment and detachment	260
Configuration	260
All of our lives are a continuity	261
Act and activation	262
Pleasure and pain as alternators.	262
Personality and clinical assessment	264
Anxiety and personality.	265
Personality and time	266
Personality as behaviour	268
Wilfulness and selflessness	269
Will and willingness	269
Personality as an emergence from family	270
The pivotal person	271
The sacrificial personality.	271
The patient as personality.	271
The patient as commodity.	272
The human economy	273
The human ecology.	274
Personality as outcome	275
Personality forgotten	276
Accumulation and discharge–recapitulation	276
Multiple choice.	276
<i>SECTION FIFTEEN: THE CLINICAL ARENA: SPACE AND TIME</i>	<i>279</i>
The appointment	279
The space.	280
Holding the space	280
Sacred space	281
Mimesis.	282
What is herbal medicine good for?	283
Enthusiasm	284
The Ailment: What does the patient wish for? Where exactly is the problem?	284
Health: the elusive diagnosis	285
Complaints: a metaphor?	286
<i>SECTION SIXTEEN: THE PRACTITIONER OF MEDICINE</i>	<i>289</i>
Empathy and the dressing–up box	289
Imagination	290
Improvisation	291

An actor prepares	292
Ambiguity.	294
Style of herbal medicine in Britain	295
A broad church	296
<i>SECTION SEVENTEEN: THE UNCONSCIOUS</i>	297
Repression	302
Leaking	303
Eurocentric	303
Unknowing	304
Dreams and dreaming: the facets of life.	305
Healing.	306
Reflexive collectivism.	307
Triangles of identity	311
Fixity and range.	313
Liminality	315
Zeal, family size and escape from the shadows	316
<i>SECTION EIGHTEEN: THE ENTRAINMENT OF POISE</i>	319
Symbolic and pragmatic thinking	321
Evidence based medicine	323
He who pays the piper calls the tune	323
A definition of poise	325
Uniqueness and the biology of poise	325
Loss of capacitance leads to symptoms of subjective illness.	327
Capacitors	329
Fatigue, listlessness and depression	330
Poise is modifiable	331
Is it really healthy to never get ill?.	331
Persistence	332
A diagrammatic representation of poise.	333
Accidents, distractions and dithering	334
Power and purpose	335
Quantifying poise.	335
Fibonacci number series and spatial and temporal relationships	337
Metaphors of poise	338
The sailing boat.	338
Being under the weather	339
Hill and stream	340
Opening and closing the fan	340
The poise economy	341

Memorialists and poise	343
The therapeutic enhancement of poise	344

PART THREE: PLANTS

Preface to Part Three.	349
--------------------------------	-----

SECTION NINETEEN: MINDEDNESS IN PLANTS AND ANIMALS

Humoralism	352
The pharmaceutical model	354
Why plants? how do they work?	355
How do plants exert an effect upon the human body?	355
Colloids and films.	357
Essentialism.	358
Terrain	359
Belief, facts and assertions	360
The four drives	362
Coherence	362
Theraps	364
Fake projection and authentic acquaintance	364
Replacement therapies	365
The medicinal act.	365

SECTION TWENTY: THE MULTI-MODAL HYPOTHESIS FOR THE ACTIONS OF MEDICINAL PLANTS: SENSORY PRIMING AND STOCHASTIC RESONANCE

The multi-modal hypothesis for the action of medicinal plants	367
Sensory priming.	368
Stochastic resonance	370
Pulsatility	371
Poly-cyclicity	372
Similarity and sameness, differentiation and uniqueness	373
Family resonance	376
Personalised medicine	376
Trials and tribulations.	377

SECTION TWENTY ONE: MEDICINAL PLANTS

Polyvalence and contradiction	379
Contradictions within the prescription	380
Drugs or adaptogens	381
Stimulus—organisation—response events or SORe	384
Symptomatic treatments	385
Is the medicinal plant an object or a process?.	385

Chemical constituents of plants	386
Structure and function	386
Animal impulses and plant responses	387
What can we do?	388
 <i>SECTION TWENTY TWO: MODES METHODS AND PARADIGMS OF TREATMENT</i>	 389
The priority of needs	389
The treatment of ailments	390
Spasmophilia and the steps in the fall from poise	391
Problems with initiating recovery	392
Adverse effects on the side	392
A health reminder.	393
Ageing and poise: losing the ratio.	394
Inclination and poise	395
Ailments and poise	396
Alternation	398
Segmented systems	399
Alternation prescribing for alternators.	400
Treat the insomnias by managing circadian entrainment	400
The parallel interlocked systems of homeostasis and circadian adaptation	401
All along the digestive tract: the many presentations of dysfunction.	404
Fussy eaters.	405
Gastro-oesophageal reflux	406
Bloating or postprandial fatigue.	406
Intestinal transit.	407
Diverticulosis	407
Pain.	408
Pain referred but also displaced.	408
Daily medicinal plants in food	409
The disadvantages of stamina	410
An approach to migraine and asthma.	411
Gout and hyperuricaemia.	413
Chilblains.	414
Heavy legs	415
Essential hypertension	415
Pimples, styes, boils, lipomas and acne.	415
Eczema and psoriasis	417
Upper respiratory infections	419
Arthralgia and myalgia	419
The bow wave	420
The treatment of pre-menstrual syndromes as well as low fecundity	421
Advice and habit	422
Eating meditation	423

Modal treatments	424
Alcohol (harmful use).	424
Anxiety	424
Acne	426
Anaemia (and Genital Ratio)	427
Arthralgia and myalgia, aching and stiffness	428
Calamitous expectation	429
Children and adolescents	430
Congestion	430
Disconnected states.	430
IBS–A	431
Intolerance	431
Osteoporosis	433
Wobbly states.	436
<i>SECTION TWENTY THREE: PLANT TAXONOMY AND SYSTEMATICS</i>	437
Botany	437
Appendix to section on plant taxonomy and systematics	442
Nineteenth century	442
<i>de Candolle in France</i>	442
<i>Lindley in Britain</i>	442
<i>Engler & Prantl in much of Continental Europe</i>	443
<i>Bentham & Hooker in Britain</i>	443
Twentieth century.	443
<i>Bessey in the United States</i>	443
<i>Hutchinson in Britain</i>	443
<i>Dahlgren</i>	443
<i>Benson</i>	443
<i>Kubitzki system</i>	443
<i>Lyman David Benson, plant classification 1957</i>	444
Principles of the taxonomy of the vascular plants in the twenty-first century	444
A list of useful vascular plants	447
Arranged according to recent phylogenetic research (APG IV 2016)	447
<i>Lycopods Clubmosses</i>	447
<i>Ferns</i>	448
<i>Leptosporangiate Ferns</i>	448
<i>Gymnosperms</i>	448
<i>Angiosperms</i>	449
<i>Basal Angiosperms 3 Families</i>	449
<i>Magnoliids 17 Families</i>	449
<i>Monocots</i>	450
<i>Eudicots</i>	452
<i>Leguminosae</i>	453

SECTION TWENTY FOUR: MATERIA MEDICA. 463

Lists of plants 463

Recommendations for the dispensary 465

Gymnosperms 466

Pinaceae 466

 Pinus 466

Monocots 466

Amaryllidaceae 466

 Alliums 466

Asparagaceae 466

 Convallaria 467

 Ruscus 467

Zingiberaceae 467

 Zingiber 468

Poaceae (= Gramineae) 468

 Agropyron 468

 Zea 469

Eudicots 469

Papaveraceae 469

 Fumaria 469

Ranunculaceae 469

 Anemone (alternative therapeutic name Pulsatilla) 469

Grossulariaceae 470

 Ribes 470

Leguminosae 470

Fabaceae 470

 Glycyrrhiza 470

 Galega 471

 Medicago 471

 Melilotus 472

 Trigonella 472

Rosaceae 473

 Agrimonia 473

 Alchemilla 473

 Filipendula 474

 Prunus 474

 Rubus fruticosus: Brambles 474

 Rubus idaeus 474

 Poterium *or* Sanguisorba 474

 Crataegus 475

 Rosa 475

Ulmaceae	476
Ulmus	476
Cannabaceae	476
Humulus	476
Urticaceae	476
Urtica	476
Fagaceae	477
Quercus	477
Hypericaceae	477
Hypericum	477
Passifloraceae	478
Salicaceae	478
Salix	478
Rutaceae	479
Citrus aurantium	479
Malvaceae	479
Tilia	479
Brassicaceae (= Cruciferae)	480
Capsella	480
Ericaceae	481
Calluna	481
Vaccinium	481
Apocynaceae	481
Vinca	481
Boraginaceae	482
Borago	482
Solanaceae	482
Fabiana	483
Dulcamara	484
Oleaceae	484
Fraxinus	484
Olea	484
Plantaginaceae	484
Plantago	484
Verbenaceae	485
Verbena	485
Lamiaceae (= Labiatae)	485
Vitex	485
Ballota	486
Hyssopus	486
Lamium	487

Lavandula	487
Leonurus	487
Lycopus	488
Marrubium	488
Melissa	489
Mentha pip	489
Ocimum	490
Marjorana	490
Rosmarinus	490
Salvia <i>and</i> Salvia sclarea	491
Satureja	491
Stachys <i>or</i> Betonica	492
Thymus	492
Menyanthaceae	493
Menyanthes	493
Asteraceae (= Compositae)	493
Achillea	493
Arctium	494
Calendula	494
Matricaria	495
Inula	495
Silybum	495
Taraxacum	496
Artemisia	496
Eupatorium	497
Hieracium	497
Solidago	497
Adoxaceae	498
Sambucus	498
Valeriana	498
Apiaceae (= Umbelliferae)	498
Angelica	498
Anthriscus	499
Foeniculum	499
Levisticum	500
Addendum	501
Schedule of the use of medicinal plants by neuroendocrine action	506
<i>Table of plants with effects upon the Autonomic Nervous System</i>	506
<i>Table of plants with reducing effects upon the Autonomic Nervous System</i>	507
<i>Table of plants with effects upon the Hypothalamic–Pituitary Axes.</i>	508
<i>Table of plants that either increase or reduce reactivity.</i>	510
<i>Table of plants with effects upon the Blood Vessels and Coagulation.</i>	512
<i>Drainage of organs.</i>	513

SUMMARY

Part One	515
Part Two.	516
Part Three	516

<i>EPILOGUE</i>	519
---------------------------	-----

BIBLIOGRAPHY AND REFERENCES525

Bibliography for plant systematics, as well as general & field plant studies	535
Phytotherapy, phytochemistry & traditional herbal medicine	536
Textbooks of basic medical sciences	538

<i>ACKNOWLEDGEMENTS</i>	541
-----------------------------------	-----

<i>INDEX</i>	543
------------------------	-----

PREFACE

I belong to that inferior group of indolent contemplatives who invent from their own minds rather than conduct experiments. I am of course grateful to those industrious teams who have provided us all with the findings of modern physiology without which the book would have no substance. Let us hope that helpful truths derive from a collaboration between thinkers and doers.

As for the latter, I would cite the flawed example of Galen who was a great experimenter yet drew erroneous conclusions from those experiments. Had he been more collaborative and less pontifical (and had the achromatic lens been invented before his time), he might not have been led nor led the world into such misguided notions, but he generated followers, not testers. Yet is experience not a test in itself? There is another caveat to experimentation as opposed to experience. The scientific method is poorly adapted to discover and reproduce truths in complex systems whose component parts are meaningless except in association. I am not hostile to RCT's and do not wish to wriggle away from those findings that dispute my own bias, but their history seems to show that they can only prove efficacy; they cannot ever prove ultimate safety nor prove lack of efficacy with more than approximate effect. By the same token, we can never know for certain the safety of using plant medicines in the long term except from the obvious and well-known cases of plants like the opium poppy with effects very like the drug that is made from it.

Although not an experiment in the scientific sense, clinical experience inevitably tests the hypotheses upon which prescription of medicinal plants is made. The words experiment and experience in other languages are interchangeable; in French, for instance, "experienced" translates as "*experimenté(e)*". While this book may not be scientific in its methodology, I hope that it fits with common sense experience, does not pander to its bias, and will correlate well with

the findings of current science, yet remain plastic enough to be modifiable by future research. I think of myself as an anthropologist whose fieldwork was conducted in the consulting room. In my dreams, I hope the book will be useful to those who have an interest in medicinal plants and to those who prescribe them. In my nightmares, yet another tedious layer has been added to the speculative nonsense that litters the history of medicine.

In case my love of speculation appears both wanton and complacent, I should acknowledge that without the staining techniques pioneered by Camillo Golgi and the painstaking experimental genius of Santiago Ramón y Cajal, the modern science of neurology on which this book is largely predicated would not have proceeded so creatively. Nonetheless, Ramón y Cajal acknowledged leaps of intuition as did the Austrian physiologist Oscar Loewi whose experiments first identified acetylcholine: “We should sometimes trust a sudden intuition without too much scepticism. If carefully considered in the daytime, I would undoubtedly have rejected the kind of experiment I performed.” Compared with the fastidious dedication shown by these physiologists, questionnaire-based experiments conducted by psychologists seem to qualify only figuratively as belonging with the scientific method. Studies that frame a question on feelings (as if these do not change by the day or the hour) as a set of little more than emoticons would seem to bypass the subtle profundities of literature and usurp literary criticism. They offer always a simple choice that excludes context. The question to be answered is itself culturally and socially relative and self-referential. Perhaps conductors of psychometric experiments are beset by the fear of not being taken seriously. Residing in low status territory fortifies many a disciplinary boundary (as herbalists would do well to acknowledge). The interplay between physics and biology creates our psyche and our interrogative faculty, our need for the contemplations of philosophy. What people believe leads to how they behave, which includes how they confront and manage pain and loss and fear of loss.

As for speculation, it might be kinder and fairer to myself, to describe Part One as an attempt at philosophy with Part Two as an application to the clinical situation. I have not really been indolent and can testify that I have read the scientific and philosophical, psychological and economic texts very carefully and broadly. Part Three wants to be taken as a serious attempt to understand how complex molecular presentations from plants to the whole body might operate. In the final sections, *materia medica* acts as the reference for the prescriber: this schedule of interventions takes its purpose from the preceding parts of the text.

These *Reflections* should perhaps be re-entitled *Reiterations*, for I have tried to turn the ideas and subjects over like someone turning a discovered object over and over in the hands, puzzling over whether it is an interesting curio, or just curious. Although I have contributed nothing to established fields like circadian physiology, I hope that mindedness, poise, adaptive capacitance are useful extensions of these accepted kinds of knowledge, at least to herbalists. I hope they will find stochastic resonance and sensory priming, useful ways of thinking about medicinal plants in the clinical setting or, an even greater hope, that someone might find a way to test them.

For all its opinions and hypotheses, this is meant as an enquiry about a subject with too many facets to hold in one view or grasp in one hand. I hope the reader will participate in formulating some answers to these deepest questions. We cannot leave it to the experts! As we develop

in the practice of medicine, we all do well to rethink not our allegiances but the true causes of them. Herbal medicine is too pervasive in human culture and history to be examined by partial and partisan views alone. I want the contradictions and inadequacies to show through. With too much certainty we are as lost as we are with none at all. I ought to apologise for being so self-serious but in this I shall just have to hide behind the subject. Life is always the only subject and there is always too much to say.

THE ORGANISATION OF THE TEXT

This book wants to discuss health with scant reference to disease. It formulates a number of interlocking ideas that integrate circadian physiology with the transformations that constitute human life. Time, ecology and the biology of plants are always part of the background. The book arranges this discussion in three interrelated parts.

Part One elaborates this integrative model of health, linking circadian biology with the psychosocial human being and takes knowledge, information and data from various disciplines. For the phytotherapeutic perspective it draws heavily upon the theoretical and clinical work of Drs Duraffourd and Lapraz. These French clinicians have demonstrated the advantages of directing medicinal plants towards the different parts of the hormonal system and of the autonomic nervous system. They have developed and modernised the theory of terrain, primarily a relativistic analysis of these neuroendocrine processes and show how medicinal plants hold much more promise when used to modify these relations than as alternatives to pharmaceutical drugs. I follow them in using plants as *alteratives* (to use an old term in a new way) rather than as weak drugs. Their work has been developed further, and collaboratively, by Dr Kamyar Hedayat. The considerable input from doctors in other nations is fully acknowledged elsewhere.¹

Part Two is aimed towards the student acquiring knowledge and developing the skills to practise medicine as well as to the newly qualified herbal practitioner. The approach focuses on the physical presentation of the patient and her or his extended milieu taken from a detailed narrative. It makes little mention of ailments and disease yet attempts to formulate a clinical approach that favours the development of a broader understanding than the knowledge gleaned

¹In *La Médecine Personnalisée*, Lapraz & de Clermont-Tonnerre, translated into English by Julian Barker. Published by Aeon Books.

from a narrow curriculum.² I hope that the model presented here and in Part Three may also provide the experienced herbalist with some new ideas.

Part Three develops a theory that attempts to explain how medicinal plants modify the terrain and how they can contribute towards health in the sense that I have described as **Poise**. The theory hypothesises two different but complementary mechanisms which I have named Sensory Priming and Stochastic Resonance. The last section of Part Three is dedicated to Materia Medica.

The three parts are nodes about which the discussion flows but, to mirror the conception of mindedness, each of them is interpenetrative with the others. The result is untidy, the more to mirror the assorted nature of life, less a manicured garden and more an extensive hedgerow adjoining ruderal habitats. The structure of the book is also founded on the interpenetration of the tripos represented by the social, psychic and biologic: this leaking of people into poise and plants into all our lives.

Note: Therapeutic Shorthand Names of Plants are used in the text. Their definition is given in Materia Medica Section 24.

²One of the best discussions I know of the difference between knowledge and understanding is found in Vignale 2011.