

# Contents

Foreword .....	XV
Preface.....	XIX
Acknowledgements .....	XXI
Introduction.....	1

## *Part I Ethical Positions Advocating the New Definitions of Death*

Chapter 1 The Position of the <i>Pontificia Academia Scientiarum</i> .....	31
1.1 Summary Statement of the Pontifical Academy of Sciences .....	32
1.1.1 Medical Assertions in the Academy's Statement .....	35
1.1.2 Other Arguments in the Academy's Statement.....	39
1.1.2.1 Argument on Consensus .....	39
1.1.2.2 Argument Concerning the Genesis of “Brain Death”.....	45
1.1.2.3 Philosophical Basis of the Academy's Position....	51
1.2 Anthropological Premise of the Academy's Position .....	53
1.2.1 Death is an Event .....	57
1.2.2 Biological Definition of Death—Death of the Organism as a Whole .....	61
1.2.2.1 The Organism as a Whole—Integrative Unity.....	62
1.2.2.2 Death—Unintegrated Parts.....	65
1.2.3 Supremacy of the Brain, the Anthropological Premise for “Whole Brain Death” as <i>the Criterion for Death</i> .....	66
1.3 Speculative Arguments in Defense of the Supremacy of the Brain.....	71
1.3.1 Arguments Based on Thermodynamics and Control System Theory .....	71

1.3.2 Arguments Using Thought Experiments.....	75
1.4 Medical Arguments Advanced to Defend the Supremacy of the Brain.....	78
1.4.1 Purported Inadequacy of the Traditional Cardiopulmonary Standard.....	78
1.4.2 Arguments Based on the Pathophysiology of Severe Brain Injury .....	80
1.4.3 From the Argument of Somatic Instabilities to the “Masking Death” Assertion .....	86
1.4.3.1 Somatic Instabilities.....	86
1.4.3.2 “Masking Death”.....	92
1.4.4 Arguments Based on Neuropathology .....	98
1.5 Revision of the Biological Definition of Death—Selective Discarding of Functions .....	101
1.5.1 Purported Insignificant Brain Functions.....	102
1.5.2 Purported Insignificant Spinal Reflexes and Spontaneous Movements .....	105
1.5.3 Difficulties with Selective Discarding of Functions .....	108
1.6 On Irreversibility.....	111
1.6.1 Irreversibility in the Context of “Controlled Cardiac/Circulatory Death”.....	115
1.6.1.1 Patient’s Autonomy as the Reason for Irreversibility .....	121
1.6.1.2 Permanence as a Stand-In for Irreversibility .....	123
1.6.1.3 Other Arguments in Defense of “Controlled Cardiac/Circulatory Death” .....	129
1.6.2 Irreversibility in the Context of “Brain Death” .....	135
 Chapter 2 The Positions of Specific Catholic Scholars.....	141
2.1 Seeking to Harmonize “Brain Death” with Catholic Anthropology .....	143
2.2 The Argument of Edward Furton—the Organ of Intellectual Cognition as the Locus of Body-Soul Union .....	150
2.3 The Position of Germain Grisez’s School .....	156

2.3.1	The Position of Germain Grisez and Joseph Boyle in the 1970s.....	156
2.3.2	The Current Position of Patrick Lee and Germain Grisez since 2012—Loss of the Radical Capacity for Sentience.....	159
2.3.3	Difficulties with the Rationale of Radical Capacity for Conscious Sentience.....	163
2.3.3.1	From Sentience to Conscious Sentience.....	163
2.3.3.2	On Consciousness and the Radical Capacity for Consciousness .....	169
2.3.3.3	Anthropological Considerations .....	174
2.4	A New Defense of “Whole Brain Death” .....	179
2.4.1	Maureen Condic’s Argument—The Organization in Brain-Dead Bodies is Only a Semblance of True Somatic Integration .....	180
2.4.2	Difficulties with Maureen Condic’s Argument.....	184
2.4.2.1	Difficulties Regarding the Cell Culture Analogy.....	184
2.4.2.2	Conceptual Difficulties .....	188
2.4.3	A Problematic Corollary—Anencephalic (“Brain-Absent”) Fetus/Newborn .....	192
2.5	Implications of “Whole Brain Death” on Questions about the Beginning of Life—the Pro-Life, Pro-“Brain Death” Inconsistency.....	196
2.5.1	“Brain Life” Theory .....	198
2.5.2	Can Pro-“Brain Death” be Harmonized with Pro-Life? ....	201
2.5.2.1	On Dependency.....	201
2.5.2.2	The Brain, an Organ as any Other Organ, a Part of the Organic Whole.....	206
2.6	The Position of Catholic Scholars on “Controlled Cardiac/Circulatory Death”.....	210
2.6.1	James DuBois’s Arguments in Defense of “Controlled Cardiac/Circulatory Death”.....	213
2.6.2	Additional Ethical Issues in “Controlled Cardiac/Circulatory Death”.....	225

*Part II Sed Contra to the New Definitions of Death—  
Life and Death in Aristotelian-Thomistic Thought and  
Contemporary Biophilosophy*

Chapter 3 Metaphysical Conceptions of the Human Person.....	233
3.1 Conception of the Soul and Body According to the “Teachers” of St. Thomas Aquinas.....	235
3.1.1 St. Augustine’s Conception of the Soul and Body .....	235
3.1.2 Aristotle’s Teaching on the Soul in <i>De Anima</i> —an Overview.....	241
3.2 St. Thomas Aquinas’s Teaching on the Nature of the Human Person .....	253
3.2.1 A Global View of Aquinas’s Conception of the Human Person .....	254
3.2.2 Aquinas’s Realism-Based Methodology—Its Implications with Respect to the Paradigm Shifts in the Determination of Death .....	257
3.2.3 Unicity of the Soul and Substantial Union of the Soul and Body .....	265
3.2.3.1 Unicity of the Soul .....	268
3.2.3.2 Substantial Union of Body and Soul .....	273
3.2.3.3 Implications of Body-Soul Substantial Union in the “Brain Death” Controversy .....	276
3.2.4 Separability of the Soul and the Issue of Early Dehominalization.....	283
3.2.4.1 The Soul as Self-Subsisting and the Unnatural State of the Disembodied Soul .....	284
3.2.4.2 The Issue of Early Dehominalization .....	292
3.2.5 Aquinas’s Teaching on the Powers of the Soul.....	301
3.2.6 Evaluation of Melissa Moschella’s Rationale in Light of Aquinas’s Teaching .....	311
3.2.6.1 Moschella’s Rationale in Defense of “Brain Death”.....	311
3.2.6.2 Difficulties with Moschella’s Argumentation.....	318
3.2.7 The Issue of the Primary Organ in Aristotelian-Thomistic Teaching.....	330

3.2.7.1	The “Primary Organ” Arguments of Benedict Ashley and Jason Eberl.....	330
3.2.7.2	Aristotelian-Thomistic Notion of the Primary Organ .....	335
3.2.7.3	Is There a Primary Organ? .....	341
3.3	Metaphysical Anthropology According to Descartes and Locke—an Overview .....	346
3.3.1	The Legacy of John Locke with Respect to the “Brain Death” Debate .....	346
3.3.2	The Legacy of Descartes in Biomedical Sciences .....	348
<b>Chapter 4 Contemporary Biophilosophical Understanding about Life and Death.....</b>		<b>359</b>
4.1	From a Mechanistic to a Holistic Vision of Life and Organism.....	361
4.1.1	Pioneering Efforts toward a Holistic Vision of Life .....	361
4.1.2	Reduction of Life Phenomena to Cause-Effect Mechanisms and Physico-Chemical Properties .....	363
4.1.2.1	Claude Bernard—Mechanism, Absolute Determinism, and Vital Force .....	364
4.1.2.2	Jacques Loeb—a Precursor of Bernat’s Doctrine of “Brain Death” .....	365
4.1.3	Holistic Vision of Life—Organisms as Anti-Entropic and Hierarchically Organized Living Systems .....	369
4.1.3.1	Joseph Woodger—Understanding Life in Terms of Organizing Relations .....	370
4.1.3.2	Life as Biological Anti-Entropy .....	379
4.1.4	Some Important Characteristics of Hierarchically Organized Living Systems .....	386
4.1.4.1	The Concept of Emergence.....	387
4.1.4.2	The Concepts of Homeostasis and Robustness.....	391
4.1.4.3	The Incoherent Notion of a “Decider” .....	395
4.2	Biophilosophical Arguments of Catholic Scholars .....	397
4.2.1	Alan Shewmon’s Philosophy of Organismic Integration.....	398
4.2.2	Austriaco’s Understanding of Life and Death from the Systems Perspective .....	404
4.2.3	A Global Biophilosophical Approach—Autopoiesis.....	409

4.2.3.1	Autopoietic Understanding of the Phenomenon of Life .....	410
4.2.3.2	Autopoietic Understanding of Death and the Question of Artificial Life.....	416
4.3	Connecting Contemporary Biophilosophy (Theoretical Biology) with Aristotelian-Thomistic Anthropology—a Brief Comment.....	420

*Part III The New Definitions of Death in the Context of Christian Ethics*

Chapter 5 Human Dignity, Sacredness of Life, and the Papal Pronouncements on Life, Death, and Organ Donation .....	431
5.1 Human Dignity, Sacredness of Life, and the New Paradigms of Death .....	431
5.1.1 Human Dignity and Sacredness of Life in the Judeo-Christian Theistic Worldview .....	434
5.1.2 Human Dignity and Human Life in a Worldview without the Transcendence.....	441
5.1.3 The Catholic Response to Death and Dying.....	449
5.2 John Paul II's Teaching on Life—The Incarnation and the Value of Human Life.....	452
5.3 John Paul II and the Neurological Standard for the Determination of Death.....	457
5.3.1 The Magisterium's Balanced and Prudential Teaching on Organ Donation .....	458
5.3.2 Critical Analysis of John Paul II's Address to the 18 <sup>th</sup> International Congress of the Transplantation Society.....	463
5.3.2.1 The First Presupposition in John Paul II's Address to the Transplantation Society .....	463
5.3.2.2 The Second Presupposition in John Paul II's Address to the Transplantation Society .....	466
5.3.2.3 The Third Presupposition in John Paul II's Address to the Transplantation Society .....	472
5.3.3 The Teaching of John Paul II on the Determination of Death in 2005 .....	480

5.4 The Teaching of Pius XII and Benedict XVI regarding Deep Coma and Organ Donation .....	483
5.4.1 Benedict XVI's Admonition on Organ Donation.....	484
5.4.2 Pius XII's Admonition on the End-of-Life Care of the Irreversibly Comatose .....	486
Conclusion .....	495
Bibliography.....	521
Index .....	585