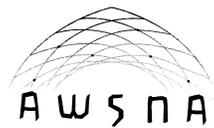


The Dynamic Heart and Circulation

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Chapter 2: edited and revised translation of the German: „Der periphere Blutkreislauf als Strömungsorgan” by Heinrich Brettschneider (in *Goetheanistische Biologie: Anthropologie*, edited by Wolfgang Schad, Stuttgart: Verlag Freies Geistesleben, 1985, pp. 207-239).

Chapter 3: edited and revised translation of the German: „Die Neubewertung der Physiologie der Herz- und Blutbewegung” by Hermann Lauboeck (in *Das Herz des Menschen*, edited by P. Bavastro and H.C. Kümmler, Stuttgart: Verlag Freies Geistesleben, 1999, pp.104-130).

Chapter 4: edited and revised translation of the German: „Dynamische Morphologie von Herz und Kreislauf” by Wolfgang Schad (in *Goetheanistische Biologie: Anthropologie*, edited by Wolfgang Schad, Stuttgart: Verlag Freies Geistesleben, 1985, pp. 190-206).

Chapter 5: edited translation of the German: „Die Phylognese des Herz-Kreislauf-Systems” by Christiane Liesche (in *Ideen zum Herz-Kreislauf-System*, Anthroposophisch-Pharmazeutische Arbeitsgemeinschaft, Stuttgart: Verlag Freies Geistesleben, 1983, pp. 30-46).

Chapter 6: Preface by Heinrich Brettschneider was written for this volume; the main text of the chapter is an edited translation of the German: „Die Ontogenese des Herz-Kreislauf-Systems” by Matthias Woernle (in *Ideen zum Herz-Kreislauf-System*, Anthroposophisch-Pharmazeutische Arbeitsgemeinschaft, Stuttgart: Verlag Freies Geistesleben, 1983, pp. 9-29).

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David Mitchell
For the Publications Committee
AWSNA

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*Preface and
Acknowledgments*

The idea to put out a book on the human heart and circulatory system arose from the desire to fill a gap. As a Waldorf high school biology teacher in Germany in the 1980s, I used a number of German-language essays—some of which now appear in a new form in this book—to prepare for my human biology, embryology, and evolution courses. I found these essays very stimulating, since they gave me a much more living and vibrant picture of the heart and circulatory system than I could ever have gotten out of traditional textbooks. The authors of these essays (doctors and teachers) applied a Goethean approach and were inspired by Rudolf Steiner’s ideas.

Steiner formulated, in the first decades of the twentieth century, some radical ideas about the heart and circulation that open up wholly new questions and perspectives. He argued, for example, that it is much more appropriate to consider the heart as an internal sense organ than as a mechanical pump (see, for example, reference # 21 in Chapter 1 of this book). However, he never meant his remarks to be taken on authority or reduced to dogma. Rather, he wanted to encourage people to break through habits of thought so that they could begin to see deeper dimensions of the phenomena. This is the effect that reading the essays included in this book had on me.

When I returned to teach in America in the 1990s, I realized that very little secondary literature, especially in the area of human biology, existed for teachers. There was a yawning gap between traditional mechanistic views and the spiritual perspectives Steiner brought. The idea to bridge this gap dawned.

This intention could only be realized after I stopped teaching full-time and, through my work at The Nature Institute, gained freedom to take on new endeavors. I ended up selecting five different essays that had appeared in different German books, to which I have added an introductory chapter. The chapters cover different aspects of the heart and circulation—atomy, physiology, embryology, and evolution. They also take into account the inner human being.

Although I conceived this book from a teacher's perspective, I think it will be of value and interest to others as well. On the one hand, I think of health professionals who want to gain a more concrete and dynamic picture of the heart and circulation. On the other hand, I think of scientists and lay people interested in learning how a Goethean, phenomenological approach can be applied to an area of human biology.

ONE OF THE MOST satisfying parts of this project was working with the authors. I am very grateful to Heinrich Brettschneider, Hermann Lauboeck, and Wolfgang Schad for their willingness to work with me on editing the translations of their texts and also in bringing the texts, where necessary, up-to-date (some of the essays appeared originally in the early 1980s). Heinrich Brettschneider assisted in editing the chapters by Matthias Woernle and Christiane Liesche; he also wrote a new and substantial introduction to Woernle's chapter. My thanks to him for all the effort he put into the book. The result of this cooperative effort is a new and, I hope, stimulating volume.

Many people are always involved quietly and behind the scenes in the production of a book. I would especially like to thank Dr. med. Branko Furst for his help. Branko read through the manuscripts very carefully and we had numerous discussions about them. His comments were very helpful and contributed to clarity in many places. I would also like to thank the following individuals for their contribution to the book: Katherine Creeger for her careful and clear translations; Christiane Marks for her initial translation of Wolfgang Schad's chapter; Jessica Hamilton and Henrike Holdrege for preparing the manuscript; Steve Talbott and Henrike Holdrege for their comments on the manuscript; Martina Müller for being open to my ideas about a cover painting and then painting a picture we both were satisfied with; Jim Kotz for helping me with the description of the hydraulic ram for the appendix; Mary Giddens for the layout of the book; and Mado Spiegler and Henrike Holdrege for proofreading.

The moment I spoke to David Mitchell, AWSNA Publications, about doing the book, he became an enthusiastic and helpful supporter of the project. Such work has to be funded and I want to thank the foundations

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