

Elan Leibner

*D*ear Readers,

This issue of the *Research Bulletin* is the second consecutive one devoted almost entirely to the theme of technology. Two of the articles are second installments of longer pieces, while all but one of the others are entirely new contributions. Every author recognizes this topic as one of the essential conundrums of our time. It is clear that the development of digital capabilities has created a void of corresponding moral and ethical capacities for using those capabilities appropriately, and, in one form or another, all of the articles grapple with this void.

Christof Wiechert, former head of the Pedagogical Section in Dornach, addresses the need for education to embed technology in the widest human context. Following Alvin Toffler's description of the three waves of technological innovation, Wiechert connects this sequence to Rudolf Steiner's evolution of consciousness. He argues for overcoming the one-sided intellectualization of society and education in favor of a comprehensive integration of the full range of human potential.

Jason Yates continues his superb treatment of current trends in technological development with the contemplation of artificial intelligence and virtual reality. Building on the theme of the digital gesture developed in the first article (*Research Bulletin* 21-2, Autumn/Winter 2016), he points at the dangers and assumptions, often indistinguishable from each other, that must be met and challenged if we are to maintain a humane and moral environment. Yates is an unusual "bird": a therapeutic eurythmist highly literate in technology who is a fine explicator of digital esoterica in a language that laypeople can understand.

Charles Weems is another unusual contributor. He has 40 years of college teaching experience in computer science and 28 textbooks to his credit. For the past 15 years he has taught at the Hartsbrook School in Massachusetts, and in his article he describes a curriculum he has developed for ninth and tenth grades. Weems is intent on bringing his students to a clear experience of the differences between a human being and a machine, and counts on this experience to help orient them toward their uniquely human tasks.

Harlan Gilbert meditates on similar themes. He looks for the tasks that technological development has placed before modern humanity and adds to the conversation an important theme: the redemption of the very beings to whom our technological devices have given an abode. He challenges us to cultivate the twin attributes of freedom and love and suggests some of the requisite attitudes that can lead us forward.

The second installment of Gopi Krishna Vijaya's contribution on Technology and the Laws of Thought enters directly into the historical evolution of thinking and logic. He shows with an abundance of examples and detail how the modern attitudes about the nature of thinking and consciousness evolved from Greek to modern times. He then points to the inherent flaws and holes in restricting the possibility for thinking to transcend its supposed limits. His essay is not an easy read, but those who persevere will be rewarded with fruits of a thoroughly researched and painstakingly mapped journey of our perception of the mind. It is a significant contribution to our theme of technology.

The final contribution dealing directly with technology is from the Research Institute's late

co-director, David Mitchell. It is an article derived from a talk he gave in Norway in 2012 and stands up remarkably well to the changes that have come about since it was written. Mitchell was prescient in seeing the challenges, opportunities, and pedagogical implications of computer technology. He convened the first Waldorf high school teachers' colloquium addressing this topic in the late 1980s and was immediately concerned with incorporating and balancing, rather than avoiding or attacking, the emerging technological reality.

Lalla Carini reports on a survey she conducted regarding the way dyslexia is diagnosed and treated in Waldorf schools. She points out that schools differ greatly in the way they approach this important issue and that there is a need for teachers, therapists, and parents to work together in order to support students. We decided to include this report in an issue dedicated to technology because there is no question that the natural follow-up to a discussion of technology in a pedagogical context is therapeutic considerations. Though dyslexia is not directly attributable to the influence of technology, Carini's report can point the way towards a collaborative approach to all therapeutic questions.

David Scott, former Chancellor of the University of Massachusetts, reviews Jennifer Gidley's new book, *Postformal Education: A Philosophy for Complex Futures*. Gidley began her career as a Waldorf teacher and incorporates a deep appreciation of Steiner's insights into her discussion. She is a highly regarded academic in her native Australia and elsewhere. We are thankful that Arthur Zajonc, Board President of the Research Institute, suggested our publication to Dr. Scott.

Reports on the activities of the Research Institute for Waldorf Education close out the issue. Patrice Maynard reports on the many projects she is spearheading at Waldorf Publications, and Marianne Alsop reports on the

rapid increase of the free resources available through the Online Waldorf Library.

Finally, a personal note: This is my final issue as editor of the *Research Bulletin*. I came onboard for Volume 16 back in 2011 and have enjoyed this task very much. The opportunity to sift through the research and the contributions has given me additional appreciation for the striving and integrity that people all over the world are bringing to their tasks as Waldorf teachers.

As editor, I have tried to shift the focus of the *Bulletin* from having been a publication that aimed to present Waldorf education to the academic community toward the needs of those who are our actual readers, namely practicing Waldorf educators. My guiding question has been: Is there a new thought in this piece, something that an experienced Waldorf teacher will find quickening for his or her work? With Douglas Gerwin, my late wife Tertia Gale, and me, we had three seasoned Waldorf folks who had to find something intriguing and worthwhile if an article was to appear in these pages. I hope that you, the readers, have indeed found the articles stimulating and supportive.

Douglas, Tertia, and Ann Erwin (layout) have been a terrific team with whom to work. The commitment they have for making sure that the T's are crossed and the I's dotted goes well beyond what my skill and patience could have managed. I also want to express my gratitude to John Wulsin, who took over as a guest editor for the previous issue while I was coping with Tertia's passing and left several pieces in the hopper for this issue.

Happy readings!

Authors who wish to have articles considered for publication in the *Research Bulletin* should submit them directly to the Editor at: waldorfresearchbulletin@gmail.com.