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CARLO, THE CEREBELLUM, AND ME

J.R. BLOEDEL *

Departments of Biomedical Sciences and Health and Human Performance, Iowa State University of Science and Technology, 211 Beardshear Hall, Ames, IA 50015, USA

To many who knew him, Carlo Terzuolo was the consummate scientist. To me he was also motivator, mentor and friend. Perhaps to the disappointment of some, his passion for his discipline compelled him to be uncompromising on issues that he considered important. To those of us who knew him well, this quality translated into an intense commitment to his work as well as to the people close to him. His intensity and commitment to his discipline were the traits I found most compelling when we first met in 1963, the year I entered his lab on a summer internship as I explored the possibility of changing from biochemistry to neurophysiology.

Even though he was immersed in the spinal cord at that time, it was clear from his discussions that the cerebellum was always more than a passing interest to him, an interest that was stimulated by his work in the laboratories of Bremer and Moruzzi. Carlo's own work on the cerebellum in the late 50s and early 60s offered a clear continuity with that of his mentors. While other outstanding scientists were focused on unraveling the excitatory and inhibitory actions of cerebellar neurons and their electrophysiological characteristics, he and his colleagues continued to ask questions that more directly related to the contribution of this structure to the regulation of motor behavior and spinal integration. The experiments being conducted in Carlo's laboratory when I arrived in the early 60s reflected one of the two major influences he had on me and my work – an emphasis on using a very strong conceptual framework. These studies not only addressed the action of descending projections activated by cerebellar efferent pathways, they also examined critical concepts of spinal integration dealing with the action of differentially distributed inputs to the dendrites and soma of alpha motor neurons (13-15, 21). He was insistent that any project worthy of an intense effort must have a strong conceptual framework and must address a question that was highly relevant functionally. In the 60s, this was a particularly important perspective because of the emphasis at that time on employing electrophysiological tools, particularly intracellular recording, to ask primarily connectionist-related questions regarding the excitatory and inhibitory action of a wide variety of central projections.

His other emphasis that had a significant impact on my thinking and the development of our laboratory was the application of quantitative techniques to the study of neurophysiological questions. This focus also served as the foundation for the first Brainerd Conference in 1969. Carlo had a strong hope that linear systems analysis

* Address for correspondence: Vice Provost for Research and Advanced Studies, 211 Beardshear Hall, Iowa State University of Science and Technology, Ames, IA 50015. Tel. (515) 294 1785, Fax: (515) 294 6100, E-mail: jbloedel@jastate.edu.