We describe the world of social-political thought in which physiological integration emerged and its influence on theories of communication in anthropology, cybernetics, and philosophy. We examine the rise of the political, legal, and internationalist language of the integration-crisis dyad in the 1920s. As integration became a key category, so did crisis, collapse, disintegration. Biological thought framed this discussion by offering many of its principal metaphors, updating the parallel of the physical body with the body politic, offering an easily comprehensible model of cooperation and crisis, and insisting on the priority of the totality of a system under threat. Second, we trace Cannon’s political and anthropological thought in the 1930s, both because of its postulate of social homeostasis and its part in the development of Wiener’s cybernetics and Lévi-Strauss’s structural anthropology. Both retained versions of Cannon’s social thought that made possible the transposition of his conception of the body onto theories of communication and social control. Third, following Mauss, we analyze the emergence of a concept of the symbolic in philosophy and anthropology, explicitly based on the neurological theories of Goldstein and Head. By redirecting metaphors of the body in political, economic, and anthropological thought, these revisions redirected social-political thought.
Chapter 2 launches our study of the body at war—the injured soldier’s body during and after World War I, and specifically the body that, once injured, appeared to be at war with itself. The chapter focuses on the fierce debates around “wound shock” that took place in the period 1916–1919 and that brought together many of the protagonists of this book who have since receded into historical oblivion. It also locates shock in a group of daunting whole-body conditions: “soldier’s heart,” shell shock, sepsis, shallow breathing, and exhaustion. These conditions provided sites for pursuing, adapting, and applying research, particularly on hormones and the interaction between different systems within the body, and consequently they supplied a framework for understanding how each organism behaves—and collapses—as a unit.

Chapter 6 studies “the individual” as it appears in the web of concepts to which these scientists fastened it, key among them “interiority” and “integration.” If physiology cast itself as a science of the individual—what kind of an individual was this? How did integration and interiority play into this individuality? We follow debates between biochemists like Lawrence J. Henderson and anti-mechanist biologists like John S. Haldane; examine the development of homeostasis as a theory of bodily integration in Walter B. Cannon; relay Henry Dale’s endocrinological work involving histamine and auto-pharmacology; and follow how, for neurologist-psychologists like Head, Goldstein, and Luria, individuality emerged as a problem with the organism’s disintegration. While
asserting the physiologically structured, integrated human being as an individual, these thinkers mostly deprived this individual of the agency that we would expect to see accorded to individuality. Instead, that agency was granted to the internal environment, the equilibrated totality of systems through which this individual responded to the outside. Although the patient or organism was called an individual, this individuality operated beneath any will, consciousness, or selfhood. Traditionally Nietzsche, Marx, and Freud are credited with subverting the concept of individuality. We credit that subversion to Cannon, Dale, and Goldstein.