Thus was the foundation laid of the "cellular theory," the profound importance of which, both in physiology and anatomy, has become clearer and more widely recognized in each subsequent year. Moreover, it was shown by two other pupils of Johannes Müller that the activity of all organisms is, in the ultimate analysis, the activity of the components of their tissues, the microscopic cells—these were the able physiologist Ernst Brücke, of Vienna, and the distinguished histologist Albert Kölliker, of Würzburg. Brücke correctly denominated the cells the "elementary organisms," and showed that, in the body of man and of all other animals, they are the only actual, independent factors of the life process. Kölliker earned special distinction, not only in the construction of the whole science of histology, but particularly by showing that the animal ovum and its products are simple cells.

Still, however widely the immense importance of the cellular theory for all biological research was acknowledged, the "cellular physiology" which is based on it only began an independent development very recently. In this Max Verworn (of Jena) earned a twofold distinction. In his *Psycho-physiological Studies of the Protistae* (1889) he showed, as a result of an ingenious series of experimental researches, that the "theory of a cell-soul" which I put forward in 1866* is completely established by an accurate study of the unicellular protozoa, and that "the psychic phenomena of the protistæ form the bridge which unites the chemical processes of inorganic nature with the mental life of the highest animals." Verworn has further developed these views, and based them on the modern theory of

* *Zell-Seelen und Seelen-Zellen.* Ernst Haeckel, *Gesammelte populäre Vorträge. I. Heft.* 1878.