

powerful and best-equipped army. But this is only the creation of the present age. With greater pride it may boast of having trained in the course of centuries the largest and most efficient intellectual army, ready at any moment to take up and carry to a successful issue great scientific undertakings demanding the intense thought and labour of a few secluded students, or the combined efforts of a large number of ready workers. This army is scattered through the length and breadth of the land, and even beyond its frontiers in neighbouring countries, wherever universities and high schools are situated.¹ It is not a stationary power, but is continually on the move from south to north, from west to east, to and fro, exchanging and recruiting its forces, bringing heterogeneous elements into close contact, spreading everywhere the seed of new ideas and discoveries, and preparing new land for still more extended cultivation.

¹ The extent of the German university system cannot be estimated by the twenty universities marked on the map attached to the translation of Conrad's book, as these represent only the existing universities of the present German empire; nor yet by the forty-three universities given in the appendix, p. 290, as they contain only some of the Austrian, but none of the Swiss universities; nor even by taking up Ascherson's valuable 'Deutscher Universitäts-Kalender,' which contains the German-speaking universities—thirty-four in number in 1887—but of course does not contain the names of those which have been suppressed. There are also the universities of Denmark, Norway, and Sweden, which have exchanged many important professors with Germany, and those of Holland in older, of Belgium in modern

times, which have done the same thing. The Russian universities also were largely organised on German models, though since the reforms of 1863 they aim at a more national character. Brandis founded the University of Athens on German lines in 1837. The Russian University at Kasan, that "ultima musarum Thule," was founded in 1804, and Göttingen supplied its first professors. From there and from the hardly less remote Transylvanian town, Maros Vásárhely, there issued the revolution of our fundamental notions in geometry, and there is reason to believe that both Lobachévsky's and Bolyai's theories are ultimately connected with the speculations of Gauss. See Prof. A. Vasiliev's Address on Lobachévsky, translated by Halsted, p. 5 377.