the southern hemisphere, yet these do not affect the general facies. There are, for example, characteristic Lepidodendroids in the Devonian and Carboniferous of Brazil, Australia, and South Africa. If now we consider the plants a little more in detail, coniferous and taxine trees grow now in very different latitudes and climates. There is therefore nothing so very remarkable in their occurrence. The great group of Cordaites may have been equally hardy; but it is noteworthy that their geographical distribution is more limited. In Europe, for example, they are more characteristic in France than in Great Britain. Ferns and Lycopods and Mares'-tails are also cosmopolitan, but the larger species belong to the warmer climates, and nowhere at present do they become so woody and so complex in structure as they were in the older geological periods. At the present day, however, they love moisture rather than aridity, and uniformity of temperature rather than extreme light and heat. The natural inference would be that in these older periods geographical and other conditions must have conspired to produce a uniform and moist climate over a large portion of the continents. The geographical conditions of the Carboniferous age, and the distribution of animal life on the sea and land, confirm the conclusion based on the flora. Further, if, as seems probable, there was a larger proportion of carbon dioxide in the atmosphere than at present, this would not only directly affect the growth of plants, but would impede radiation, and so prevent escape of heat by that means, while the moisture exhaled from inland seas and lagoons and vastly extended swamps, would tend in the same direction.

It would, however, be a mistake to infer that there were not local differences of climate. I have elsewhere[1] advocated the theory that the great ridge of boulders, the New Glasgow conglomerate, which forms one margin of the coal field of Picton,

[1] "Acadian Geology," Carboniferous of Picton.