

2007年12月1日雅思A类考试阅读第一篇 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/491/2021_2022_2007_E5_B9_B412_E6_c67_491295.htm Professor Macfarlane has spent many years wrestling with the enigma of the Industrial Revolution. Why did this particular Big Bang - the world-changing birth of industry happen in Britain ? Macfarlane compares the puzzle to a combination lock . "There are about 20 different factors and all of them need to be present before the revolution can happen" , he says. "For industry to take off there needs to be technology , power to drive the factories , large urban populations to provide cheap labour , easy transport to move goods around , an affluent middle-class willing to buy mass produced objects , a market-driven economy and a political system that allows this to happen". Whilst this was the case for England , other countries such as Japan , The Netherlands and France also met some of these criteria. Most historians are convinced there are one or two missing factors that you need to open the lock. The missing factors , Macfarlane proposes , are to be found in every kitchen cupboard - tea and beer , two of the nations favourite drinks fuelled the revolution. The antiseptic properties of tannin , the active ingredient in tea and of hops in beer - plus the fact both are made with boiled water - allowed urban communities to flourish at close quarters without succumbing to waterborne diseases such as dysentery. The theory initially sounds eccentric but his explanation of the detective work that went into his deduction and the fact his case has been strengthened by a favourable appraisal of

his research by Roy Porter (distinguished medical historian) the scepticism gives way to wary admiration. In 1947 at 6 years of age , Macfarlane , the son of a tea planter in Assam , came to England and the difference between Third World India and the homeland hit him hard. He remembers , "From the cosy , warm outpost , I arrived in the depths of one of the coldest winters. Britain was more efficient but seemed to have lost some of the emotion and warmth of the place I had come from. Ever since then , I have wanted to know how these two worlds could have diverged so". The difference he guessed was down to industrialisation , which brought him round to the question ; how did the Industrial Revolution come about ? For historians there was one interesting factor around the mid-18th century that required explanation. Between about 1650-1740 , the population was static , but then there was a burst in population. Macfarlane says "The infant mortality rate halved in the space of 20 years , and this happened in both rural areas and cities , and across all classes." Four possible causes have been suggested ; was there a sudden change in the viruses and bacteria around ? -unlikely. Was there a revolution in medical science ? - this was a century before Listers revolution. Was there a change in environmental conditions ? - there were improvements in agriculture that wiped out malaria , but these were small gains and sanitation did not become wide spreads until the 19th century. The only option left is food , however the height and weight statistics show a decline at this time , so food actually got worse and efforts to explain the sudden reduction in child deaths appeared to draw a blank. The population

burst seemed to happen at just the right time to provide labour for the Industrial Revolution. But why ? Macfarlane says "When you start moving towards an industrial revolution , it is economically efficient to have people crowding together , but then you get disease , particularly from human waste" Historical records revealed that there was a change in the incidence of waterborne disease at that time , especially of dysentery , and Macfarlane deduced that whatever the British were drinking must be important in regulating disease. He says ; "We drank beer and ale. For a long time , the English were protected by the strong antibacterial agent in hops , which were added to make beer last longer". However in the late 17th century a tax was introduced on malt resulting in the poor turning to water and gin , and in the 1720s the mortality rate began to rise again then it suddenly dropped again but what caused it ? Macfarlane looked to Japan which was also developing large cities at this time and also had no sanitation , however waterborne diseases had a much looser grip on the Japanese population than those in Britain. Could it therefore be the prevalence of tea in their culture ? Macfarlane says "Thats when I thought , what about tea in Britain ? " Tea in Britain was relatively expensive until a direct clipper trade with China was started in the early 18th century and by the 1740s about the time infant mortality was dipping , tea was common. Macfarlane guessed that the fact that the water had to be boiled , together with the stomach-purifying properties of tea , meant that the mothers breast milk was healthier than it had ever been. No other European nation sipped tea like the British , which by Macfarlanes logic pushed them

out of contention for the revolution. If tea is the factor in the combination lock , why didnt tea soaked Japan forge ahead and have an industrial revolution of its own ? The reason , Macfarlane believes , is that it turned its back on the essence of any work-based revolution by giving up labour-saving devices , such as animals , afraid they would put people out of work. Astonishingly , the nation that is now thought of as one of the most technologically advanced entered the 19th century having abandoned the wheel. Macfarlane notes that while Britain was undergoing the Industrial Revolution , Japan was undergoing an industrious one. 100Test 下载频道开通 , 各类考试题目直接下载。详细请访问 www.100test.com