The Impact of British (Scottish) Influence of Technology and Business to China and Japan after India in the Late Nineteenth Century

Masami KITA*

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1) Cultural and Historical Difference between Scotland and England

Though Scotland occupied the North part of the British Isles and had some similarities in terms of race, religion and culture since medieval period, Scotland constituted an entirely different nation.

When Queen Elizabeth I died in 1603 leaving no successor, King James VI of Scotland was invited to become the head of the English nation under the title of James I, creating a history of the Union of Crowns. However this did not herald the beginning of a real collaboration or co-operation between the two nations.  

In 1694, the Bank of England was founded in London under a Scottish manager and soon became quite successful, branching out into the wool trade as well as trade with India through the English East India Company (EIC). On the contrary, its counterpart, the Bank of Scotland

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established in 1695, became heavily indebted and nearly bankrupt as a consequence of the activities of the West India Company (Darien Company) in West Indies.  

In order to maintain the very survival of the nation, Scotland was forced to accept the proposal of unification on rather unfavorable terms of one twelfth pound depreciation. In 1707, under the Union articles, Scotland was granted membership of the United Kingdom, which exempted it from the Navigation Act of 1651 and allowed it free entry into any port of the old English Empire (which then became the British Empire).

In 1715, the first Jacobite Rebellion lead by the loyalist and unsatisfied landlords to the Union of 1707, took place and the executives of the Bank unsuccessfully supported the Rebellion.

Then in 1727 the Westminster government decided to set up a most-favored bank in Scotland in cooperation with the English leaders; consequently the Royal Bank of Scotland was founded. Again the Second Jacobite Rebellion took place in 1745, both banks executives did not longer support the revolts to favour of advanced economic prosperity of the South. It means that the Lowland of Scotland more closely related to England than to the Highland of Scotland. In addition, one year after 1745, the British Line Company (constituted as a Bank) was granted the Royal charter of banking business in Scotland.  

As the city of Glasgow found the shortest distance between the American city Boston, London lost its importance to conduct tobacco and sugar trade with America. Instead Glasgow became the important port of entry and exit. Scotland became the successful business leader of the trade was called the Tobacco Lord, becoming the leader of Scotland gaining immense fortunes in many ways.

The prosperity of the tobacco trade in Scotland, the introduction of new industry especially that of cotton and of linen initiated by their English favored committees of Annexed Forfeited Estates Commission and of Board of Trustees of Manufacturers and Board of Trustees for the Improvement of Agriculture and Fisheries started in 1727. And the committee suggested to revitalize her trade with the West Indies.

The Scottish banking practice, composed of three major Scottish bankers, initiated collaborative business transactions and practices which were different from the monopoly of Bank of England in the South.

2) The Influence of the Scottish Renaissance

In late 18th century, the Scottish Enlightenment, supported by the laird (landlord) became the vanguard of European philosophy of humanity and which had languished since the Middle Ages. Pursuing different scholastic goals than Oxford and Cambridge of England which preferred to teach noble subjects, the four Scottish universities namely St. Andrews, Glasgow, Aberdeen and Edinburgh devoted themselves to pursuing practical and profitable activities in using their own
hands suitable for the modern world. The characteristic of practical education in Scotland was rooted and symbolized into the Act of the first European compulsory education to ordinary peoples in 1496.

The tradition of Scottish practical education worked well with the increasing demand of engineering activities while the civil society appeared and developed.

In due course, Scottish technological education became the hallmark of education imparted at Anderson College at Glasgow founded in 1786. The College produced a number of good assistants to professional engineers who graduated mainly from Glasgow and Edinburgh universities in Scotland. Then, Anderson College (later called Strathclyde University) was also linked through Scottish engineers to the Royal Schools of Mine, Chemistry and Science in London (later called the Imperial College of Technology).

Between 1780 and 1815, the expansion of EIC business activity was developed beyond the business boundary of India in employing the local peoples (Lascar). In 1813, the privilege of EIC with India and in 1833 with China was abolished as free trade with Scottish traders progressed and spread.

A number of Scottish engineers from universities known for their scientific and technological inventions rushed to India. In fact it is said that the Industrial Revolution was achieved by the first generation of Scottish engineers in the fields of textile (linen, jute, cotton, wool), coal, iron (pig, malleable, wrought and steel) and mechanical goods (locomotive, rail and steamers), and shipbuilding. Scottish engineers who came to India belonged to the second and third generation of these engineers.

3) Scottish Shipping to Asia in Nineteenth Century

According to the expansion of Scottish activities in the World with new knowledge and technology, owed to the great inventions of steam engines and related machines, Scottish engineers made Glasgow the capital of mechanics and shipbuilding and in the consequence of that, they contributed to launch many shipping companies in the world market.

In fact, Scottish shipping to India and China was accorded with the expansion of Glasgow and Scottish business interests. In particular, after the victory of Calcutta, British India strongly wanted to invite the steam navigation company to control the sea routes and protect trade against natural upheavals such as sea tides and strong wind. Scottish rivals in Bombay which were related to old partners favored the big and conventional sailing vessels.

With the abolition of Navigation Act after the 1st Opium War, American clippers joined the competition of tea trade between India and London and regularly crossed the Pacific. Although Scottish shipbuilders used her advanced naval technology to build worldly renowned beautiful and
high speed clippers such as *Stornoway, Chrysolite, Cutty Sark* navigate the oceans before the era of steamship navigation, the age of clipper was short and transient.\(^{(13)}\)

Then during the transient time from wood and sailing to iron and steam engine, in Asian waters, the competition between Scottish steamers and American paddle steamers (Russell & Co, Augistine Hard, Oliphant & Co) was rather fierce.\(^{(14)}\)

When the initiation of steamship navigation, there were several British (Scottish) shipping companies in the Asian sea, like British India Steam Navigation Co., Peninsular & Oriental Navigation Co., Anchor Line, T. Isamay & Co, Messrs. Sloaman & Co, Hamburg, New Zealand Shipping Co, Clan Line (Cayser Irvine Co), Maclay & McIntyre Co, Furness Witny Co and Elder Demster Co. These ships mostly built mostly at shipbuilders of Glasgow and West of Scotland with highly advanced rigs.\(^{(15)}\)

As one of the important elements to help the international expansion of Scottish peoples, they had the tradition of working abroad in Europe since the medieval time through the mercenary and business activity to improve their lives. They were then able to establish their own network to help each other often termed as Scottish outer nepotism.\(^{(16)}\)

In the nineteenth century, Scottish network were almost worldwide and Scottish diplomatic network was made through Lord Gordon who became Minister of Foreign Affairs in 1824 & 1841 and later PM in 1852 and who appointed many his friends to the foreign service to the new frontier of British Empire.

In fact, the 8th Lord Elgin, James Bruce was posted to China, where his brother Frederic was the first British Ambassador, to consult the Arrow Incident and was ordered to go to Japan immediately after the rumor of American and Japan trade treaty by Townsend Harris.

There were a number of international navigation companies in Asian sea because the western powers in the late 19th century, sent their national shipping companies with their expectation of new business opportunity. Among them, there were British companies of P&O, B. I., Anchor Ismay, Allan Shipping, Holt, Clan Shipping & Blue Funnel Line and French Messageries Maritimes, Dutch Netherland & S. S., German, Hamburg American Line and America, Swire Navigation Co.\(^{(17)}\)

4) **Scottish Approach to India and China**

Scottish traders actively approached China coast to take part in the lucrative trade as the vanguard of British capitalism. In 1832, J&M (Jardine & Matheson) Co started an office at Guangzou for the opium trade after the defeat by Jewish, D. Sassoon at Bombay. Then, in 1833, Monopoly of EIC trade with China was abolished to offer the many individual traders to join such a profitable trade.

In 1840, the 1st opium war was taken place and after suppression of the revolt in 1843 at
Shanghai, three British Consulates, Shanghai, Xiamen, Guangdong were established. Scottish merchants, J&M, Mata Gibb, Livingston, also started their own business branches there. In next year, America & France signed the treaty of commerce with China to participate in the business activities at Shanghai.\(^{18}\)

In 1845, the First Shanghai Land Act of twenty-three articles was passed and in next year, the Committee on Road & Jetties (G. Wolcott of Russell Co for American Consul, Alcock for that of UK) was founded. In 1847, Oriental Bank set up her branch and Anglican Church & Society of Jesus established her station at Shanghai.

In 1849, French territory of the land was also formed and In next year, P&O initiated the navigation route to Shanghai and then, many merchants and businessmen quickly visited Shanghai and proceeded to enter into the inlands part of China along the big rivers.\(^{19}\)

In accordance with the construction of civil society at Shanghai, the first English newspaper of North Herald China (later to be North China Daily in 1864) was started to provide news and information among Western peoples of Shanghai. But the reaction against the Western aggressive invasion to China was happened in the form of the revolt at Shanghai in 1851. After the suppression of the first Taiping Rebellion, in March 1853, the Germans started a consular house. In April, J. Perry Commodore of American East India Co. started Singapore via Shanghai for Japan.

In June 1854 UK, America and France singled the custom treaty with China and adopted the second Land Act of Shanghai. They also launched the Bureau of Public Work as its administrative function. In February 1855, Parks accompanied Sir Bowling to Siam to sign the treaty in next year. Scottish businessman H. N. Lay initiated a tax office and engineer W. Willis built the first wooden Western bridge in Shanghai.\(^{20}\)

In January 1858, European Committee was launched under the chairman of Parks and in November, trade agreement of custom among three nations with China was ruled, in December of the year, R. Alcock was appointed to General Consul of Japan (in June next year, he entered Nagasaki & Edo).\(^{21}\)

In January 1859, Parks was appointed Consul at Shanghai and In June, American Minister of Harris moved from Shanghai to Nagasaki. In September, Scottish merchant T. B. Glover firstly reached Nagasaki as an agent to Mackenzie Co. and later became an agent of J&M. It is noteworthy of the Japanese translation of General Geography written by W. Muirhead well known Scottish philosopher was published.\(^{22}\)

In July 1860, the treaty of Arrow Incident, China admitted Christianity and foreign diplomat was allowed to stay at Peijin and added the number of trade ports, In October, French Comptoir d’Escompte de Paris founded. British and American missioners started some colleges, hospitals and printing houses at various places. W. Saunders arrived to set up the first studio of photography
at Shanghai (he died at Yokohama in 1893). In 1861, W. L. Wood & Y. J. Allen launched the New Shanghai Weekly Journal. In addition, many firms like cotton spinning and mechanical engineering were established as branch of industrial giants of Glasgow, Liverpool and Manchester.

5) Scottish Influence in China

In 1862, the second revolt was taken place to attack the Shanghai foreign settlement. Consequently, British and American united to make a common territory and ameliorated the road system of Shanghai against the rebellion. American Russell & Co launched the first local line of Shanghai Steam Navigation Co.

It happened that the Japanese visit to Shanghai from 6th May to 5th July of this year, by Senzai-Maru, Tomoatsu Godai, Kuranosuke Nakamuda and Ryoma Sakamato visited Shanghai to look around the modern society under the Western Influence.

In 1864 March, British merchant launched Shanghai gas co and Royal Mint at Hong Kong which was closed to be sold to Japan in 1868.

In 1865 April, Hong Kong Shanghai Banking Co started her Shanghai branch. August, first post office and Gas lights were made at Shanghai. In 1866 January, German Club of Shanghai was organized, August, Gass Light was also introduced to French quarter. October, Russell & Co established first telegraph office, French built a dockyard at Fuzhou.

American big rush to China was followed again after the end of her Civil War and in 1867 October, Pacific Mail between Shanghai and San Francisco was initiated. In 1868 June, British Butterfield & Swire Co opened her Shanghai branch. and because of the business demand, many banks of Scottish origin, Chartered Bank of India, Australia & China, Chartered Mercantile Bank of India, London & China, Oriental Banking Cooperation opened their branch and a French banking of Comptoir d’Escompte de Paris also started there.

In 1869 April, committee of UK, America & German consuls agreed to make a rule at Shanghai foreign settlement. In November of the year, F. Lay succeeded in providing 1 million pounds at Shanghai for Yokohama Shokin Bank which was designed by Scottish engineer, J. Robertson. in 1870. In 1871 the cable line between Hong Kong and Shanghai was made to connect the line finally to London.

6) European Approach to Japan before 1858

Western (British, Scottish) peoples worked abroad and emigrated to new promissory land of the world with new technology through three major industrial progress and expansion of railway, steamer and telegraph. In terms of telegraph, there were three routes, firstly through Siberia via
North Europe, secondly India and China and thirdly America and Pacific Ocean. 28

In February 1854, Perry entered Edo Bay and signed the Kanagawa Amicable Treaty. At that time, American Presbytery D. M. McCartee was asked to go to Japan. Then, in next year, J. L. Nevius to China and Hepburn to Japan as assistant were appointed.

In October of the year, Anglo-Japan Amicable Treaty was agreed and Hakodate Bugyo (director) was posted to deal with visitors from foreign country Western approach was made mostly to Hakodate of Hokkaido and Nagasaki of Kyushu. 29

In 1855 February, Russo-Japanese Amicable Treaty was signed and in March, two British ships entered Hakodate when Japanese father and son of Tsuchi tried to build a copy of small Western ship at Hakodate only by themselves. On the other hand, the old regime of Tokugawa government invited Dutch Navy officer, G. Fabius to build an ironwork factory to prepare the iron ship construction at Nagasaki.

In 1856 January, Dutch-Japanese Amicable Treaty, February Institute of foreign studies was started at Hakodate, July at Hakodate, foreign ship was allowed to get beef meat only at Hakodate, where N. Muragaki was appointed to the Marshall and American General Consul, Harris arrived at Shimoda. Foreign studies institute was made at Edo. 30

In 1857 September, under the agreement, Dutch naval engineer, W. J. C. Kattendijke & doctor Pompe van Meerdervoort arrived at Nagasaki to foster young Japanese engineers and doctors. In April the same year, E. E. Rice, American Trade Commissioner arrived at Hakodate and taught Japanese, English and sheep breeding, in July Tuzuki built a Western ship, Hakodate-Maru, helped by U. Fukushi who learned a rig from British sailor, October M. Nakamura, ex-fisherman of Kouchi who had been distressed by American ship and was permitted to return home after the Meiji Reformation, visited Hakodate to teach a method of whale catching which he had learned while in America. 31

7) European Visitors to Japan After 1859

In 1858 February, American surgeon, C. M. Harts arrived at Hakodate to hand the letter from American President and in July America and Japan Amity Trade Treaty was made and in August, three nations of Dutch, UK, Russia and in October, French followed to sign the same sort of the treaty. 32

Scottish diplomat, 8th Lord Elgin (James Bruce) on behalf of UK came to sign the treaty on the ship navigated by Cap. G. Osborn to present the yacht under the name of Emperor and he accompanied Scottish fellows, secretary L. Oliphant, photographer J. Noslin. Then in December of the same year British first consul to Nagsaki, G. S. Morrison, to Hakodate, Hodgeson, to Kanagawa Cap. H. Vyse, were posted. French used staffs of Dent company to foreign service in Japan, for
example, Scottish K. R. Mackenzie to Nagasaki.

Scottish traders and businessmen were very smart to come to Japan soon after Japan open up the nation, as they mostly in comparatively short distance, moved from Hong Kong, and Shanghai, because they could enjoyed the exclusive privilege of the exchange favorably for them in using Mexican dollar against Ichibugin (Japanese silver coinage) and Ichiryo (gold coinage) of Japan in those days.33

There were a number of British (Scottish) companies to Yokohama like Dent & Co, Fletcher & Co, D. Sasson & Co, which moved from Shanghai, G. Barnett & Co, Adamson & Co and from other areas, like Macpherson & Marshall, W. Kemptner, Ross, Barber & Co, H. J. Hooper, Aspinal, Cornes & Co, Hughes, Willgos & Co. Those merchant houses dealt with the import of cotton, textile, sugar and oil and the export of gold and silver coinages, copper, silk, tea, sea-weeds for Japan.

A very good number of Scottish peoples visited Japan in the end of Tokugawa and early Meiji periods. Among them, famous peoples were W. Keswick, grandson of the founder of J. & M. to China in 1855 and then to Nagasaki & Yokohama after Japan opened A. A. Shand, clerk of Chartered Mercantile Bank of India, London & China at Yokohama and worked for the establishment of Bank of Japan and fostered many Japanese youth to bank clerks. R. H. Brunton who became the first foreign employee by Meiji Government in 1868 came from R. Stevenson Co at Edinburgh to construct lighthouses around Japan. A. R. Brown, a captain of P&O, firstly helped Brunton in navigation and secondly founded N. Y. K. Japanese navigation Co which was originally Mitsubishi Steamer Co. and on his return to Glasgow, he set up the a merchant house of maritime goods. Brown was appointed to be the consul for Japan at Glasgow. In 1883 when he returned UK., F. Elgar being invited to Japan in 1873 to build dockyards and ports, returned to be the first professor of naval architecture at Glasgow university.34

8) Scottish Contribution to the Intellectual Development of Meiji Japan

A) The Influence of New Scottish Ethics and Philosophy on Japan

The introduction of new ethics (Ideology of Engineers) to change feudalistic idea to the new spirit of working hard and diligently to build a modern nation enough to be called the Britain of the East.35

Many books of Scottish teachers were translated into Japanese, which encouraged to make peoples understand the concept of Western civil society. Aoki Shusuke of Choshu clan translated the book of W. Muirhead, M. Nakamura for the book of S. Smiles, T. Hayashi for the book of J. S. Mill and the book of the Wealth of Nations by A. Smith as well. Those books of Scottish thinkers and engineers gave a big influence to Japanese youth of the outline of Western civilization. Then, the ideology of engineers, namely that engineer should be granted for the fourth modern profession
in next to lawyer, medical doctor and priest already admitted in the medieval time, was socially
enhanced.36

A Scottish railway engineer E. Morel who came through the works at India, proposed the
government to launch the Ministry of Public Work so as to promote the Industrialization of Japan.
He invited engineers of J. England, H. Houghton, R. Abbey & T. Shann. In addition, W. Cargill,
manager of Oriental Bank, worked for raising foreign bonds for railways in Japan.37

This idea of the Ministry was based on the success of Bureau of Public Works at Hong Kong.
Then, he suggested the Meiji government to promote the total scope of social development of Japan
to break through the old ethics of feudal society with the Scottish ethics which was rooted into the
ideology of Scottish Renaissance.

There a number of British (Scottish) teachers to higher institutions of Japan, like H. Dyer, the
father of technological education in Japan, W. Burton who was invited by Ministry of Home Affair
and contributed to development of sanitary fields of Japan. W. Anderson, Director of Medical bureau
of Navy College in Japan. B. H. Chamberlain, came to Japan as telegraph engineer and with W. B.
Mason, published a handbook of travelers in Japan. H. J. Black and his father J. R. Black started the
Japan Herald in the end of Edo era. He became the first Western comedian at Kobe.

It is another very interesting for us to know a number of American engineer and missionary
rooted in to the Scottish origin. These peoples like J. C. Hepburn, priest of American Dutch
Reformed Church, Princeton University graduate, whose father was from Bothwell and
Presbyterian. E. Dunn, arrived to Hokkaido in 1873 to be called the Father of Dairy business in
Japan, whose grandfather from Edinburgh. W. S. Clark, most famous foreigner in Japan to teach
Sapporo Agricultural College, who studied at Freiburg School of Mine and Gottingen before
Japan.38

A number of Scottish American Missionaries related with American Presbytery and Dutch
Reformed Church came to Japan and moved further to Korea and China.39

B) The Role of Scottish Teachers in Japan

The root of British teachers to Modern Japan was mainly from Scottish universities of Glasgow
and Edinburgh based on the basic education at Anderson College (now, Strathclyde University)
and English institutions influenced by Scottish technological education. Scottish teachers to
Kobudaigakko, Kaisei School, Imperial & Tokyo University.

1) Glasgow University was concerned, there were H. Dyer (Principal, Civil Engineering), W. G.
Dixon (English Literature), T. Gray (Telegraphy), T. W. Watson (Engineering), T. Alexander
(Mechanical Engineering), A. Hillhouse (Naval Architecture), J. Struthers (Chemistry), J.
Perry (Civil Engineering), W. E. Ayrton (Telegraphy).

2 Edinburgh University was concerned, there were D. H. Marshall (Telegraphy), J. A. Ewing (Engineering), C. G. Knott (Physics), J. M. Dixson (English), W. Renwick (Mint). Interesting enough, Scottish Missionaries & Doctors, H. McGill, Church of Scotland at Edinburgh, was concerned with Japan and raised a fund of 9000 pounds in 1872 to send Rev. H. Waddell (from China), Rev. R. Y. Davidson & Dr. H. Faulds (EU Medical graduate, discovery of fingerprint), T. A. Palm (from Sri-Lanka) Dr. Neil G. Munroe, EUM graduate, came to Japan in 1862 launched Yokohama hospital, Sanatorium at Karuizawa & moved to Hokkaido to study and preserve the Ainu culture.

3 London Schools of Mine, Chemistry & Science (Imperial College of Technology) was concerned, there were W. Gowland & E. Dillon (Mint), E. F. Mody (Drawing), E. Divers (Chemistry), J. Mine (Telegraphy, via GU) and

4 University College, London was concerned, there were J. Condee (Architecture), R. W. Aitkinson (Chemistry), J. E. Manning & P. William (Railway).

9) Conclusion: Some Characteristics of the Scottish Diaspora in Japan

In Japan until recently, Japanese historians worked on Meiji Japan using only the historical documents available in Japan. In the 1860’s though Japan was supposedly isolated from the rest of the world and limited only to the Far East, it nevertheless was related with the world economy and politics. There were many documents written on Japan by non-Japanese visiting scholars which were now possible to access. To the Japanese all westerners were pejoratively called Ketou. Most Japanese were unable to distinguish the British from other European peoples.

Any discussion about the Scottish diaspora must also take into account the recent studies defining the concept of the European Diaspora and how it is different from the old definition of the Jewish and the Armenian diasporas. Many Scottish scholars prefer to use the term Scottish Diaspora to refer to both the Scottish diaspora in the World and also in Asia.

The paper argues that the movement from 1830 to 1870 laid the foundation of modern social and economic relations between the western and Asian countries through business enterprise and education.

In my conclusion, I wish to reiterate five major characteristics of the Scottish Diaspora that developed in Asia and Japan. They are the following:

· Firstly, a network of Scottish diplomats, merchants, engineers, teachers and missionaries developed throughout Asia, and this network was founded on an intelligent fusion of science and information.
· Secondly, an efficient organization of sending emigrants and receiving immigrants from other places developed as a consequence of historical experience since the medieval times and in particular, after the Jacobite Rebellion of 1715 and 1745.

· Thirdly, a tradition of practical engineering skills and philosophy and a balanced development of the individual in society gradually grew to encourage trade and commerce.

· Fourthly, the development of the locomotive, railway, mechanical engineering and steamer as the quintessence of the Industrial Revolution and fifthly, the growth of cultural pride, international tolerance.

Reference


35) H. Dyer, *Dai Nippon, the Britain of the East*, Blackie & Son, Glasgow, 1904, pp.vii-x.