

Ideas and Origins of the Planning Commission in India

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The ideas of economists and political philosophers, both when they are right and when they are wrong are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually slaves of some defunct economist.

—John Maynard Keynes

Introduction

Economic science, economic planning, and politics are deeply entwined while tracing the origins of planning in India. The purpose of this chapter is to survey the prominent ideas in the early 20th century that influenced Indian academics, intellectuals, and political leaders when the postcolonial Indian planning state began to take shape.

I discuss the central ideas in economics that gained prominence following the waning of *laissez-faire* economics, like Soviet-style central planning, fascism, American progressivism and institutionalism, and Fabian socialism. Related

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to these ideas is the changing toolkit of economists with the increasing use of mathematics and statistics. This chapter tracks these ideas and their influence on Indian intellectuals to understand the path that led to planning in India.

The Indian experience with planning in the early 20th century involves scientists, politicians, mathematicians, economics professors, theologians, and leaders of the nationalist movement against the colonial government. I argue that the planning exercise in India can be attributed to two distinct factors. The first is the role of economic ideas in the sociopolitical movement for Indian freedom. These ideas were largely socialist leaning and created the foundation on which the economic policy of India was to be based. The second is the role of scientists and technicians who created the planning apparatus through which socialist ideas could be executed.

Laissez-faire Abandoned

Adam Smith and the 19th-century classical economists viewed the system of natural liberty as one that harmonized self-interest and social interest. Consequently, they believed in allowing the market to function with minimum control by the state. Laissez-faire economics, after the publication of *The Wealth of Nations* in 1776, dominated the economics profession for the next 100 years.

However, in the late 19th and early 20th centuries, faith in markets began to wane. Marx's ideas, as outlined in *Das Kapital*, gained popularity in Europe and ultimate recognition with the birth of the Soviet Union. Simultaneously, in the late 19th century, the United States witnessed an ideological change towards progressivism. Unlike Marx's ideas, progressivism largely supported markets but with emphasis on greater state intervention. Examples of this change are the Sherman Antitrust Act of 1890 and interventions in other areas such as food and drug safety, agriculture, and monetary policy.

By 1924, John Maynard Keynes had written an obituary titled 'The End of Laissez-Faire'. The first criticism was that decentralized market activity does not lead to optimal economic allocation, especially savings and investment. This critique was more generally developed initially by utilitarians such as John Stuart Mill and Henry Sidgwick. Later, neoclassical welfare economists like Alfred Marshall and A. C. Pigou developed a literature on externalities, commons, and market failures (Medema 2007). The second criticism was that individuals acting in their self-interest may not know what they are doing, leading to poor individual and social outcomes. Irving Fisher (1907: 20) argued, 'We cannot let any dogma of *laissez-faire* prevent us from checking suicidal ignorance.' Keynes's work on allocation of savings and investments in an economy also echoed this sentiment (Keynes 1926: 318–319).

A different criticism came from Marxists, who were not concerned with allocative efficiency, but distributive outcomes. Marxists thought the natural operation of decentralized markets will inevitably lead to a concentration of capital and wealth, thereby leaving the capitalist system fundamentally unstable and unjust. The only solution was to abolish private property (Marx and Engels 2011).

Between the concerns over allocation and distribution, society moved away from *laissez-faire* towards more government intervention (White 2012: 12–31). However, experts reached no widespread agreement on the kind of necessary or sufficient intervention in the economy. Different economists advocated different levels of intervention, and the early 20th century witnessed economies led by socialists, progressives, Fabians, and fascists.

Although both the Cambridge school and the Fabians called for a greater role for government in the economy, the Cambridge school was sceptical of collectivism. Alfred Marshall said that ‘economists generally desire increased intensity of State activities for social amelioration, that are not fully within the range of private effort: but they are opposed to that vast extension of State activities which is desired by Collectivists’ (Marshall 1907). Like Marshall, Fisher argued, ‘We are doubtless today in danger of too much socialistic experimentation; but nothing can be gained and much may be lost by ignoring or condoning the opposite evils of individualism’ (Fisher 1907: 20). The Fabians, on the other hand, admired the complete collectivization of the Soviet as the end goal to be reached using democratic social reforms as a means instead of a revolution (Webb 1920).

This trend away from the *laissez-faire* system can also be seen in the Indian freedom movement. Indian intellectuals of the 20th century, such as Ram Mohun Roy, Dadabhai Naoroji, and Gopal Krishna Gokhale, were influenced by British and Continental liberal philosophers. Roy was an advocate of ‘a limited government presenting a variety of checks on any abuse of its powers’ (Roy 1834). He argued for constitutional limitations constraining the British East India Company, and believed a strong free press and independent judiciary along with a voting citizenry were the future of India (Bayly 2007).

Nineteenth-century Indian liberals believed in British values and wanted to make these available to Indian citizens of the Crown. They founded the Indian National Congress, which went on to play a leading role in the independence movement. Dadabhai Naoroji, an Indian liberal intellectual, argued that British economic policy impoverished Indians and drained wealth from India to Britain through high taxation. He also said that the economic policy pursued in India was very ‘un-British’ and that policies that integrated Indian citizens into the empire and lowered taxes would benefit both Britain and India (Naoroji 1901). In his 1886 presidential address to the Indian National Congress, he emphasized the advantages of British rule in India and declared the loyalty of Indian citizens to the Indian government and the Crown. His main message was to improve the state of

impoverished Indians through representation. He called for the Congress to gain better representation in the British parliament, and in the Indian Civil Service, mainly to rewrite the taxation policies of the colonial government.¹ Naoroji was also a liberal thinker and ‘first and foremost a constitutionalist’ (Doctor 1997: 28).

Gopal Krishna Gokhale² was inspired by liberal thinkers like Edmund Burke and John Stuart Mill and believed in a free society with a limited role for the state in provisioning public goods and free education (Guha 2010: 99). Though both Naoroji and Gokhale wrote extensively against the British Empire and supported self-rule in India, their demand was for a liberal, not socialist, society.

In the 1920s, the movement for some form of home rule or *swaraj* gained momentum. At the All Parties Conference in 1928, Motilal Nehru wrote a draft constitution calling for a democratic republic, the first constitution written exclusively by Indians. It conceived of Dominion Status for India within the empire and outlined a bill of rights similar to the American Constitution. But with time, and with the passing of leaders like Gokhale and Naoroji, the strong liberal fervour within the Congress faded.

As intellectuals moved away from *laissez-faire* in Europe and the United States, Indian leaders educated in England in the early 1900s who grew to prominence the 1920s onwards grew more inspired by socialist ideas. In the large-scale exercise of the freedom movement and nation building in the 1930s, socialism was a foregone conclusion. The type of socialism and the precise development plan were yet to be worked out.

The ideology of planning gradually found its way into the heart of the burgeoning independence movement, the Indian National Congress. The Congress Socialist Party, spearheaded by Nehru and full of planning enthusiasts, was formed within the broader fold of the Congress in 1934. Congress also organized the National Planning Commission in 1938 to detail the role that state planning could play in the growth of the nation. The commission met through the late 1930s and early 1940s, developing proposals that greatly influenced the goals and the institutional structure of planning in independent India.

In addition to the National Planning Commission’s report, intellectuals, activists, and technocrats also worked on economic plans for India. By the end of World War II, socialism was the new orthodoxy in Indian politics. This led to the adoption of economic planning when India became independent in 1947.

Soviet Socialism

Lenin led the Bolsheviks to form a new government based on the ideas of Karl Marx. But Marx’s ideas never delineated *how* the economic system would be organized under socialism (White 2012: 28–31).

When the time came to execute Marxist ideas, planners were faced with an intellectual vacuum. Nobel laureate Leonid Kantorovich observed that

the economic theory of Karl Marx became the methodological background of the new created Soviet economic science and of the new control system. Some of its important and fundamental statements on general economical situations turned out to be applicable immediately to a socialist economy. However, a practical use of Marx' ideas needed serious theoretical research. (Kantorovich 1989)

Lenin's government ran with two basic ideas – nationalization of property and central planning. The Bolsheviks established a central planning agency known as the Supreme Economic Council. The council nationalized the banking system, controlled foreign trade, nationalized large industrial enterprises with labour committees in control of factories, nationalized small businesses, outlawed private trade, private hiring, and private leasing of land, and even tried to eliminate the use of money.³

The result of the policies of the Supreme Economic Council was calamitous, and far from what Marxists had envisioned. Industrial output plummeted, food shortages were widespread, and fear of starvation consumed the countryside. Lenin introduced the New Economic Policy (NEP) in 1921, which readmitted market exchange, allowing peasants to sell their produce and substituting a lower percentage tax for the previous confiscations. Small businesses and services were denationalized, and private trading was once again allowed. The economy improved under Lenin's NEP.

Meanwhile, Marxist–Leninist ideas went well beyond Russia and influenced governments in central Europe, such as Hungary and Bavaria. Their influence in Vienna affected the broader discussion of economic ideas. With the political victory of the social democrats, socialist planning was inevitable. E. H. Carr (1985) has chronicled the impact of the revolution on Europe and Asia and described it as the coming of a new 'true democracy'.

The Soviet system was a huge inspiration to Indian students in England and continental Europe. Several student groups had deep communist connections or communist sympathies – including the Federation of Indian Students' Societies in Great Britain and Ireland, the League Against Colonial Oppression, India League, Hindustan Community House, Cambridge Majlis, Oxford Majlis, and the Committee of Indian Congressmen. Special groups, such as the Progressive Writers' Association, the Left Book Club, and the Oriental Printing Press, supported socialist and communist writers.⁴ These organizations, though in England, were quite influential in India. Because of a strong connection between the Indian student nationalist movement and communist and socialist ideas, several

young Indians like Jawaharlal Nehru and Minoo Masani visited the USSR in 1927 for the tenth anniversary of the Bolshevik revolution.

Describing this visit, Nehru wrote, ‘The contrast between extreme luxury and poverty are not visible, nor does one notice the hierarchy of class.’ He concluded that the ‘Soviet Union treated its workers and peasants better, its women and children better, even its prisoners better’ (Guha 2007: 161–162).

In a syllabus of academic and intellectual readings publicized in the 1930s by the socialist wing of the Congress party, the author writes:

It will be noticed that this syllabus contains only books in favour of socialism. It may be asked why no books have been included which argue against it, for are there not two sides to every question? We emphatically deny the validity of the later proposition. For a man of action, and every socialist is a man of action, there is only one side to the question. No action is otherwise possible.⁵

This reading list was one of the hundreds of pamphlets distributed in the 1930s and 1940s to educate people on the nature of development problems and solutions in India.

But many in the Indian nationalist movement could not reconcile themselves with certain aspects of the Soviet system, most specifically the restrictions on speech and press. Nehru, after he became prime minister, in a letter to state chief ministers in 1953, wrote: ‘Thus far we see a full-blooded socialism, if that is the right term, working in Communist countries, together with the accompaniment of authoritarian control and an absence of the democratic approach.... Certain economic results are undoubtedly obtained that way, but the price paid is heavy.’⁶

The Indian freedom movement can be characterized as Gandhian – nonviolent, non-cooperative, and involving civil disobedience by large masses of people making it difficult for the British to govern India. The centralized dictatorial control of the Soviet system did not receive acceptance in the Congress Party or among the people at large. The Congress Socialists urged the Congress to be more sensitive to the rights of workers and peasants and detested the coercive politics of the Soviet Union.

Minoo Masani was quite enamoured with the Soviet system during his time at the London School of Economics (LSE). He later changed his position, mainly in response to the coercion involved in the Soviet system – an idea at odds with his Gandhian values. By 1940, Masani was very critical of socialism, communism, and Marxism and wrote a detailed critique, *Socialism Reconsidered* (Masani 1944). He attacked the methods used by communists and socialists, such as abolition of private property, as never leading to an equal society.

While intellectuals across the world debated the desirability of socialism, economists debated the feasibility of socialist calculation. The socialist calculation

debate was kicked off by Ludwig von Mises in his paper in 1920 followed by the 1922 book *Socialism*, which explained why the socialist system of planning cannot be executed. Socialism required social ownership of the means of production and the abolition of private property. Mises argued that without the private ownership of the means of production, there would be no exchange of these means of production, and therefore no exchange ratios. Without market prices emerging from exchange, the planners cannot calculate profit and loss, and therefore cannot rationally allocate these goods (Mises 1922).

This critique questioned the core of the socialist system, which had not resolved how to allocate production. A second issue was that without prices reflecting the scarcity of each good, it was impossible to determine the appropriate production process. Given the impossibility of rational economic calculation in socialist planning, F. A. Hayek demonstrated that the emergent institutional structure would require planners with unlimited discretion to execute the plan (Hayek 1944).

While the Misesian critique made a big impact, it did not make socialist planners deviate from planning. Oskar Lange provided one answer to the Misesian critique (Lange, Taylor, and Lippincott 1938), which involved consumer goods being sold privately in the market, with the means of production under central planners' control. Lange proposed that the central planners would set initial prices and have state firms minimize costs subject to the preset prices. Any resultant surpluses or shortages would be communicated back to the planners, who would adjust prices and quantities in the future. Lange's error was in assuming that once the set of equilibrium prices was reached, this state of equilibrium would remain stable. The Lange solution, lauded at the time, ignored the role of incentives of individual decision-makers within the economy, and the process by which information emerged and was communicated in a market economy. But mainstream economists largely accepted the market-socialist solution to the calculation problem.

Based on the ideas of Oskar Lange and Abba Lerner, and the plans created by GOSPLAN, Indian economists set to work. During the 1930s and 1940s, many plans were created for the specific needs of India's development problems. The first emerged in 1934 – by the engineer M. Visvesvarayya. The essence of his *Income Plan* was to industrialize India and double national income every 10 years. In the 1940s came the *Bombay Plan* – chaired by Ardeshir Dalal and drawn up by a group of industrialists – outlining various sectors of the mixed economy. The *People's Plan*, crafted by Marxist M. N. Roy, which encapsulated the position of the more radical communist left, perhaps embodied the ideas of Lange–Lerner most closely. The *Gandhian Plan* of S. N. Agarwal, which emphasized a self-sufficient closed economy, preserved the village as the unit of economic activity.⁷

In an academic culture in India dominated by support for socialist policies, B. R. Shenoy was the only one aligned with the ideas of Mises and Hayek. Shenoy's criticism of Indian planning began in the 1950s with his famous 'Note of Dissent' on a draft of the second five-year plan (B. R. Shenoy 1955). Among the 20 economists on the government advisory panel, he was the sole dissenter (Bauer 1998: 2). Other Indian economists either took the Lange–Lerner position as a given, and worked on other aspects of the planning problem, or made minor changes to the Lange–Lerner position to adapt it to the Indian economy.

Shenoy's views opposed those of international luminaries such as Lange, Nicholas Kaldor, Joan Robinson, Gunnar Myrdal, and Ragnar Frisch, who were all enthusiastic supporters of the Indian experiment with planning. Shenoy was ignored and these luminary economists captured the imagination of P. C. Mahalanobis, a much more powerful intellectual within the political planning movement.

Fascism/Nazism

Departing from the Soviet model, fascist economics attempted to reconcile totalitarianism with individualism. Middle-course fascism steered between a competitive and a collectivist economy led, in practice, to a heavily monopolistic-interventionist society, with extensive governmental control of prices and capital investments and large 'socialization of losses'.

It is difficult to identify any fundamental theoretical or analytical framework of fascist economics. Wilhelm Röpke argued that, at best, one can develop a set of themes or ideas, without theoretical underpinnings, to understand fascist economics, like illiberalism, totalitarian control in economic choices, economic nationalism, and militarism (Röpke 1935: 85).

Fascism retains nominal private ownership of business but puts government in close control of major investment and production decisions. The best-known version of fascist economics in action comes from Italy, led by Mussolini from 1922 to 1943. Fascism took the form of a system of cartelization and planning by 'corporatives' – government–business–labour boards with government as the controlling partner. Cartels or guilds essentially controlled output and kept prices high and competition at bay. In return, producer guilds catered to the resource needs of the fascist government and fuelled its militarist ambitions.

In Hitler's Germany, the ruling party that imposed fascist economic policies called itself the National Socialist German Workers' Party. Under Hitler, the German economy was increasingly controlled by the government. Each policy led to the next policy intervention, and soon Nazi policies were eerily similar to totalitarian planning in the Soviet Union. German economist Walter Eucken

details the consequences of the New Plan in 1934 leading to greater levels of economic control by the Nazi Government. The important distinction, as pointed out by Eucken, is that the German control of the economy was accidental, with each intervention creating subsequent need for more intervention. This was unlike central planning, where the intention was to control allocation of resources across all sectors and industries (Eucken and Hutchison 1948: 79).

While fascist economics had the rhetoric of class theory, unlike Marxist economics it had no fundamental principles of economic interests and class. It differed from communism because it required no revolutionary changes to the economic and social structure of society to support the classes that helped it into power (Röpke 1935).

Fascist economics was known to Indian intellectuals in the 1920s and 1930s. Gandhi had interacted with Mussolini and seemed quite impressed with his plans in general. However, in 1931, Gandhi expressed his mixed opinion of fascism as he wrote to Romain Rolland:

Mussolini is a riddle to me. Many of his reforms attract me. He seems to have done much for the peasant class. I admit an iron hand is there. But as violence is the basis of Western society, Mussolini's reforms deserve an impartial study. His care of the poor, his opposition to super-urbanization, his efforts to bring about co-ordination between capital and labour, seem to me to demand special attention. (Zachariah 2014: n. 73)

After the events of Kristallnacht on November 1938, the Indian National Congress made a declaration against Hitler's Germany (Hauner 1983: 67). In the *Jewish Tribune*, Nehru called Hitler's government an 'amazing tyranny' that had no human standards.⁸ Gandhi was similarly sharp in his criticism of Hitler's regime, and provided the main impetus to support the British in World War II against Hitler, despite seeing the British colonial government as an oppressor.

The main support for fascist ideas in India came from Subhash Chandra Bose – the president of the Indian National Congress in 1938. While Bose condemned the events of Kristallnacht and was critical of the racist policies of the Nazi government against Jews, blacks, and other people of colour, he saw an Indo-Germanic alliance as valuable in overthrowing the British government in India. Bose also had strong communist and fascist leanings in his economic views and saw the state as a valuable player in economic planning. In *The Indian Struggle*, Bose called for a synthesis between communism and fascism and started the planning wing within the Congress party to create an economic plan for liberated India (Bose 1934).

Sareen (1996: 44–45) argues that Bose was not interested in the ideology of Nazi Germany but was collaborating with it to liberate India. However, Zachariah

(2014) documents how Bose alienated himself from Nehru over the Nazis because he wanted to maintain Indo-Nazi relations while Nehru wanted to give asylum to the Jews.

Despite some support for the Nazi government and some relations formed in the 1920s through student exchange programmes between India and Germany, after 1938 Indian support for the Nazis declined markedly. Due to the Gandhian and nonviolent nature of the Indian nationalist movement, Indian political elites had a conflicted view of fascist economics, but they eventually condemned fascism and Nazism for their military agenda and repression of minorities. As in the rest of the world, in India fascist and Nazi economics was now inseparable from the pogrom. The rejection of political oppression also meant a decline in support for the economic ideas. By the end of the war and at the birth of the Indian republic, there was no support for fascist or Nazi economic ideas.

American Institutionalism and Progressivism

While ideas of state planning were taking root in Europe, Americans were not completely insulated from it. The historical school politically opposed classical liberalism and methodologically opposed the abstract theorizing of the older, classical and the newer (post-1871) neoclassical economics. Many American economists were trained in Europe and were exposed to the historical school of economics.

An important economist in this era was Thorstein Veblen. In his book *The Engineers and the Price System* (1921), Veblen characterized businessmen as monopolists seeking to restrict output, raise prices, and increase profits. He advocated state intervention where engineers could run the modern economy better and more efficiently than the decentralized price system. Some of Veblen's policies were so similar to socialist planning that many debate whether Veblen was an institutionalist or a socialist (White 2012: 117).

Other important economists publishing in the American institutionalist tradition at this time were Simon Patten, Richard T. Ely (the founder of the American Economic Association), and John R. Commons. But institutionalists' ideas did not persist because of the Great Depression and the Keynesian revolution.

In the United States, the analogous event to the October Revolution in Europe was the Great Depression. Ideas of interventionism and planning were taking root even in the early 1920s, but the Depression hastened these policies. Two very influential economists in the Depression and post-Depression years were Tugwell and Keynes.

Rexford Tugwell was a student of Simon Patten (of the German historical school) and later became an important economic advisor to F. D. Roosevelt.

Tugwell was attracted to Italian fascism and wrote that Mussolini's regime was 'doing many of the things which seem to me necessary' and was 'the cleanest, neatnest [*sic*], most efficiently operating piece of social machinery I've ever seen'.⁹ Tugwell wrote: 'I have said plainly, that there is much to be said for economic isolation, that it is here to stay, and that therefore *laissez-faire* is dead.' In an earlier speech, Tugwell was equally blunt: 'There is no invisible hand. There never was' (White 2012: 120). Before 1935, many progressives could and did admire aspects of fascism's economic system, despite their distaste for its repression of civil liberties. American expressions of admiration for Mussolini's economic policies stopped as he allied with Hitler.

During the 1930s, two of the most important questions faced by economists were the reasons for the Depression and its prolonged nature.

To explain the Depression, John Maynard Keynes argued that the market economy had collapsed on its own and had become trapped in a vicious cycle from which it could not free itself. This cycle starts with the public saving its income by hoarding money, rather than spending it on consumption goods or financing capital investment. This saving is a leakage from the economy, reducing expenditure and therefore reducing output, that is, the 'paradox of thrift'. In this event, consumer- and capital-goods industries face losses. With the piling up of these losses, individuals and banks invest and lend still less to business, and further hoard their income. The inability to exit this cycle causes a prolonged depression, and the economy needs help from the state.

Keynes's suggestion was to change monetary policy to break out of this cycle. And that government spending and/or an increase in spending on public works could lead to greater employment and therefore greater demand for goods, boosting aggregate demand.

In sharp contrast, F. A. Hayek's theory of the Depression stated that the crisis was the result of credit expansion having allowed investment to outrun voluntary saving. So, the expansion was the error, and the contraction is the correction. Government policies to augment consumption demand would only worsen the crisis. Hayek's policy prescription was to do nothing and let the market naturally adjust and recover from the effects of the credit expansion.

Although Keynes's critique of markets and his prescriptions for state intervention were radically different from the orthodoxy, he fundamentally believed in markets and explicitly rejected socialism. He suggested that the capitalist economy was having 'magneto' (alternator) trouble, as against the socialist idea that the entire automobile should be replaced. He explicitly rejected Russian communism for three reasons: (a) it 'destroys the liberty and security of daily life'; (b) its Marxian economic theory is 'not only scientifically erroneous but without interest or application for the modern world', and its Marxist literature more generally is

‘turgid rubbish’; and (c) it ‘exalts the boorish proletariat above the bourgeois and the intelligentsia’ (White 2012: 130).

Though competing explanations were offered by Keynes and Hayek at the time, Keynes’s analysis and policy prescription caught on remarkably fast and within a decade became part of the mainstream economic explanation of and solution for the Great Depression.

Keynes and Hayek had different connections to Indian intellectuals. While many Indians studied at the LSE, Hayek’s ideas on business cycles did not capture the imagination of Indian students. B. K. Nehru recalls that Indian students were much more influenced by the political science department than the economics department. About Hayek in particular, he wrote, ‘Professor Hayek from Vienna who was so much beyond me that I had to give him up fairly early’ (B. K. Nehru 1977). B. R. Shenoy was the only major Indian intellectual connection with Hayek at the time. Shenoy was a graduate student at the LSE when Hayek delivered the lectures that formed the basis of *Prices and Production*. Shenoy was so smitten with the Austrian tradition that, according to his daughter, ‘after studying Austrian theory, he said he was immunized against every other framework’ (S. Shenoy 2003: 2). He later became famous as the only dissenter to planning.

Keynes had worked in the India Office for a few years,¹⁰ and had contact with Indian students at Cambridge as an undergraduate and Fellow of King’s, President of the Cambridge Union, Secretary of the Cambridge University Free Trade Association, a frequent guest speaker at the Cambridge Majlis (the Indian students’ society), founder of the Political Economy Club, and university lecturer in economics. He came to the defence of Indian students amidst great controversy over an article advocating limiting the number of Indians at Cambridge (Chandavarkar 1990: 153–160). Through the Political Economy Club, he influenced students like V. K. R. V. Rao (who later set up the Delhi School of Economics, and was the Planning Advisor for the Food Department in India), L. K. Jha (who became the Governor of the Reserve Bank of India), and I. G. Patel, who served as the Chief Economic Advisor in India.

In all his writings on India, Keynes only limited himself to very specific policy questions on the Indian monetary system and did not concern himself with the larger questions of the welfare of the Indian citizens under colonialism, imperial economic policy, or high taxation and wealth extraction – which were burning questions among Indian nationalists (Chandavarkar 1990: 134–139).

The Keynes–Hayek debate on business cycles was against the backdrop of the Great Depression but was taking place in England. During the Depression, in the United States, Tugwell had the most influence over policy. Tugwell believed that the Great Depression had been caused by industrial overproduction that had clogged markets, driven by myopic profit seeking and abetted by the absence

of any top-down oversight of the economy. He was named assistant secretary of agriculture in 1933, the position he held while helping to devise the economic centrepieces of the early New Deal, the National Industrial Recovery Act and the Agricultural Adjustment Act.

Just as competition among nations leads to war, Tugwell suggested, the Great Depression shows us that competition among business firms is similarly destructive and wasteful: 'War in industry is just as ruinous as war among nations', while 'order and reason are superior to adventurous competition'. The alternative was central economic planning (White 2012: 120).

American institutionalism and progressivism did not have a major influence on Indian academics and activists at their peak in the United States. Not many Indian students travelled to the United States for education, mainly due to hostile immigration policies, distance, and a lack of awareness of employment opportunities awaiting those with an American degree. A British education could be used to gain entrance to the civil services, legal profession, and so on, in India.

Two notable members of the Indian nationalist movement went to the United States. The first was B. R. Ambedkar, an Indian intellectual from the untouchable caste. Ambedkar received a PhD in economics at Columbia University, and then went to England to the LSE for a DSc. Ambedkar's exposure to economic ideas was at Columbia University, a stronghold of the institutionalists. He took various economics courses both in specific subjects such as monetary policy and public finance, and also in the history of ideas.

Ambedkar's economics mentor was Edwin Seligman, best known for his work on the progressive income tax and for being one of the founding members and early presidents of the American Economic Association (AEA). Ambedkar's PhD dissertation, titled *The Evolution of Provincial Finance in British India*,¹¹ was critical of the imperial British system and its harmful effect on Indian development.

Ambedkar was also inspired by various progressive and socialist reformers at Columbia such as John Dewey and James Harvey Robinson. His other major publication was a paper called 'Castes in India, Their Mechanism, Genesis and Development', given first in a seminar with Alexander Goldenweiser in the anthropology department (Ambedkar 1917). Ambedkar, however, did not spend the Depression years in the United States and left to pursue his legal studies at the LSE.

The second was Jayaprakash Narayan who went to Berkeley and worked in the fields, service jobs in hotels, restaurants, and so on, to pay for his tuition and living expenses. Due to increases in tuition, he was forced to transfer among the Universities of California, Iowa, Wisconsin, and Ohio. During his years as a student, Narayan experienced the difficulties of the working classes at first-hand; it was difficult to get an education while making ends meet even in a sophisticated

economy such as the United States. While in Wisconsin, he was introduced to Marx's ideas, which made a big impression on him. Though Narayan studied sociology and not economics, he had strong views on the working of the economic system and was not an institutionalist or a progressive, but a radical Marxist when he left the United States and returned to India in 1929.

Fabian Socialism

A fourth strand of non-laissez-faire economics emerged from the Fabian Society. Founded in 1884 in London, it was a group that left the radical socialists and utopian socialists to create a society that focused on evolutionary socialism. The society took a gradualist approach to changing the economic system with the end goal of creating a democratic-socialist state in Britain.

The general Fabian view was that the wages and position of labour had improved through the 19th century in part because of various social-reform legislation. The idea was to continue this trend and create a political framework to gradually move towards more equitable distribution of wealth and eventually the public ownership of capital and property in society. This social-reform programme was not to be conducted by the masses or the proletariat, but was to be brought about through legislation by experts.

George Bernard Shaw and Sidney Webb were the movement's intellectual leaders, writing short tracts and publicizing them to mobilize a new kind of socialist thought. Other early members were Annie Besant and Graham Wallace. From the 1880s to the 1930s, the society turned out more than 200 'Fabian Tracts' advocating social democracy.

Fabians also founded and built up the Labour Party. Sidney Webb helped with its founding in 1900 and served in important executive positions and as a Member of Parliament (MP). He coauthored election manifestos and the Labour Party constitution that was adopted in 1918 (Webb 1918). In the interwar period, the Fabians grew in prominence and essentially shaped socialist legislation and policy in British politics through the Labour Party.

In 1891, another important member, Beatrice Webb, wife of Sidney Webb, joined the Fabian Society. Together, the Webbs founded the LSE in 1895. Another influential Fabian, William Beveridge, served as the university director of the LSE from 1919 to 1937. The interwar years were extremely important for the LSE as an international and cosmopolitan institution. The Fabians had a clear position against the imperialist and colonial policies of Britain and attracted a lot of interest from international students from various colonies, especially in South Asia and Africa.

One of the most influential Fabians at the LSE was Harold Laski, professor of political science. Laski's *A Grammar of Politics* (1925) detailed the case for Fabian socialism. In the 1930s, Laski drifted from Fabianism to a more Marxist socialism, and published a number of books including *Democracy in Crisis*, outlining Marxist ideas. Laski was the most beloved teacher and had an immense following of British and international students, whom he and his wife welcomed beyond the classroom into their home.

No narrative of socialism in India can be written without talking about the role of the LSE. Indian ideas of socialism were essentially a variant of Fabianism. The LSE represented a reaction 'against individualism and *laissez-faire*, cosmopolitanism and free trade and against the rule of intelligent amateurs who had emerged from real and would-be upper-class families, from the public schools, from Oxford and Cambridge' (Dahrendorf 1995: 28).

Unlike the conservatives or liberals at the time, the Fabians were particularly interested in the treatment of citizens in British colonies. The society organized lectures to introduce new scholars and ideas of socialism. The early members of the Fabian Society are immensely important: Dadabhai Naoroji and Annie Besant.

Naoroji was a member of the Fabian Society and lectured for at various Fabian events on the plight of Indians under the imperial rule between 1880 and 1890. Naoroji, a member of the Liberal Party, was elected to the House of Commons from Central Finsbury in 1892 by a margin of three votes. His victory was due to his involvement with the Fabian Society in London, which supported the candidacy of an Indian facing racism in London (Shaw 1892).

Annie Besant was involved with the Fabian Society from the beginning through her close association with G. B. Shaw. She attended the first conference in 1886 and gave a presentation on socialization of capital. She then joined the Theosophical Society and moved to its headquarters in India. This group was extremely instrumental in the Indian nationalist movement, and many more Indians became exposed to Fabian ideas through Besant's presence in India. Besant also campaigned for the rights of Indians and launched the Home Rule League in 1916. In 1917, she became the first woman president of the Indian National Congress at the Calcutta session.

One of Besant's protégés was V. K. Krishna Menon. Menon then studied at the LSE under Laski, gaining a BSc and an MSc in politics as well as a teaching diploma. He was one of Laski's most successful Indian students. They also developed a close personal friendship over the years, and he led the Laski Society after Laski's death.¹²

Menon was the link in the next generation (after Naoroji and Besant) between the Indian nationalist movement and the Fabians in London. He transformed Annie Besant's Home Rule League for India into the India League in 1928, a

Britain-based organization whose aim was to campaign for full independence and self-government for India. Menon became joint secretary of the organization in 1928 and radicalized it, rejecting its objective of Dominion Status for the greater goal of full independence.

Menon was extremely close to key members in the Fabian Society and the Labour Party, and relentlessly lobbied for the Indian cause through Labour MPs in the British Parliament. He also became the focal point of the Indian nationalist movement in London from the 1920s onwards. He mobilized British and Indian students towards the cause of Indian independence and was personally responsible for the careers of many Indian students studying in Britain.

In addition to Menon, two important leaders of modern India had their intellectual roots at the LSE. The first, and perhaps the best known, is Jawaharlal Nehru, who went on to become the first prime minister of India. Nehru went to Harrow and Cambridge and was 'hovering about' London studying for his Bar examinations (J. Nehru 2004 [1936]: 25), before being called to the Bar in 1912. During his time in London, he heard Shaw at a lecture in London and was introduced to other Fabians by Menon, including Laski, with whom Nehru formed a close relationship.

The second was B. R. Ambedkar, who studied at the LSE after receiving his PhD in economics at Columbia University. Ambedkar was the architect of the Indian constitution as the chairman of the Drafting Committee, and a member of Nehru's cabinet in the 1950s. Ambedkar was a member of the Fabian Society, and Laski's ideas come alive in Part IV, that is, the Directive Principles chapter of the Indian Constitution.

Ambedkar and Nehru were not the exceptions but the norm. Students interested in the nationalist movement gravitated to the Fabians because they were the only group interested in the Indian cause since the 1880s. Laski was an important influence for Indian students in this regard. B. K. Nehru, cousin of Jawaharlal Nehru and another Indian student at the LSE in the late 1920s, was 'received with the utmost courtesy' by Laski, 'who gave me then, and throughout my stay, more personal attention and more affection than my academic or other achievements ever deserved' (B. K. Nehru 1977: 25). Laski took such a personal interest in both the Indian nationalist cause and the welfare of Indian students at the LSE that he became the intellectual focal point for Indian students at the LSE. Dahrendorf writes:

Tributes written in India, at the Laski Institute in Ahmadabad, betray the lasting gratitude of Indians to the man who stood up for their independence early, who propounded a view of the modern state which seemed relevant, and who taught many of those who led the new country in its early stages. (Dahrendorf 1995: 229)

B. K. Nehru astutely observed that

Indian students in particular were all Left-wing; the more extreme they were the more patriotic they were considered to be. The explanation was simple: the burning issue for us [Indian students] was Indian independence; the socialists and communists supported it; the capitalists and Conservatives opposed it. Ergo, socialism (or communism) was good; capitalism bad. (B. K. Nehru 1977: 20)

Eventually these Indian students were involved in the nationalist movement, mainly through the Indian National Congress. This group successfully won freedom and transitioned from the colonial government to form India's own government. And the socialist members of the nationalist movement were in key government positions.

B. K. Nehru also observed that 'the students of the LSE were then extremely left wing- the large majority were socialists or communists; so was the thinking in the Political Science Department, which dominated our thinking, rather than the Economics Department which was always more conservative'.

The one exception was B. R. Shenoy, who was influenced by Hayek, not Laski. Shenoy was not very involved in the Indian political movement and had little to no influence in policy for most of his life.

Laski's students went on to become future presidents, prime ministers, cabinet ministers, senior civil servants, and important members of the Planning Commission in India, and through them his ideas persisted. Guha recollects the remarks of an unnamed wit in the 1950s that 'in every meeting of the Indian Cabinet there is a chair reserved for the ghost of Professor Harold Laski' (Guha 2003).

The Apparatus of Planning

Parallel to, and not unrelated to, the new ideas in political economy, was a much greater use of mathematics and statistics in economics. This major change percolated to Indian economists, most notably through P. C. Mahalanobis.

Koopmans (1977) distinguished the classical models of general equilibrium from the optimization models of central planners. From the perspective of economists working on the planning of the economy as a whole, the old tools of classical economists were not useful. Now a new vocabulary and toolkit were required to optimize at the economy-wide level.

Kantorovich observed:

There appeared a necessity to shift from study and observation of economic processes and from isolated policy measures to systematic control of the economy,

to the common and united planning being based on the common aims and covering a long time horizon. This planning must be so detailed as to include specific tasks to individual enterprises for specific periods and to that common consistency of the whole this giant set of decisions was guaranteed. It is clear that a planning problem of such scale did appear for the first time, so its solution could not be based on the existing experience and economic theory... The treatment of the economy as a single system, to be controlled toward a consistent goal, allowed the efficient systematization of enormous information material, its deep analysis for valid decision-making. (Kantorovich 1989: 18)

The use of mathematics in economics started well before economists began using optimization models for policy purposes. In the 19th century, Alfred Marshall recommended the use of mathematics as a shorthand language rather than as an engine of inquiry, and after providing 'real life examples' culminated his discussion with the fiery slogan 'Burn the Mathematics' (Kantorovich 1989: 22).

However, in addition to a language, mathematics developed into a means to achieve specific ends. This may be related to the use of optimization models for policy purposes. Koopmans perhaps best described this view: 'While "problems" are to some extent posed by conditions and needs of society, "tools" and states of training in the use of tools are part of the personal acquaintance of the investigator' (Koopmans 1957: 170).

While Kantorovich and Koopmans represented one branch of mathematics, using optimization models to fine-tune the running of the economy, another branch of mathematics, using data and statistics, was gaining momentum.

Ragnar Frisch was interested in economics questions but trained in mathematics and received his doctorate in mathematical statistics in Oslo. In the 1930s, Frisch did pioneering work in econometric modelling and measurement, including inventing the word 'econometrics' to refer to the use of mathematical and statistical techniques to test economic hypotheses.

Jan Tinbergen, who held a PhD in physics, had become interested in economics while working on his dissertation, 'Minimum Problems in Physics and Economics' (1929). Tinbergen was one of the first economists to create multi-equation models of economies. He began to apply mathematical tools to economics, which at the time was a relatively verbal and nonmathematical discipline. Along with Frisch and others, Tinbergen carved out the field of econometrics.

While the tools used by economists differed based on the training and acquaintance of the individual investigator, different types of tools were indeed required for different ends. Economists conducting any type of planning exercise required a model of inputs and outputs, and data on prices and quantities, to optimize production. This type of investigation required the use of economics

and statistics to solve the problem at hand, irrespective of the personal preference or the skill of the investigator.

Paul Samuelson, in his Nobel Prize lecture, observed that economists had essentially evolved and adapted ideas from other sciences to enable them to perform the tasks of optimization, whatever the scale.

This leads to the idea that the normative implications of economic science changed the toolkit used by economists and therefore the practice of economics. Not only may economics have an influence on policy, but policy implications may drive economics – not simply the questions asked by economists, but the tools used by economics. P. C. Mahalanobis astutely observed the connection between the changing ideas within economics – the goals of government policy – and the use of statistics. He argued that ‘statistics is not only an applied science but also a public science’.

Mahalanobis (1986: 45–46) saw a strong connection between state planning and statistics and gave three examples: (a) During the New Deal, when unified governmental policy became indispensable in the economic field, effective action was taken for the central coordination of the statistical activities of the federal government. (b) In the United Kingdom under *laissez-faire*, statistics had been developing in a haphazard manner without any focal centre within the governmental machinery. After the war, the importance of the Central Statistical Organization had continued to increase with the growth of social and economic planning. (c) In the USSR, centralization in the statistical field had gone much further and from the beginning a Central Statistical Bureau had been an integral part of the GOSPLAN. No plan can be put into operation until it was cleared by the statistical bureau.

Mahalanobis’s observation holds particularly true for the Indian experience, where the political movement, the call for economic development, and the pursuit of economic ideas were all deeply entwined with the development of policy tools. In the Indian experience, government policies affected the tools used in economics. But scientists and mathematicians called to help with developmental planning also changed government policy because they viewed the economy as a technical or engineering problem to be solved and believed the problem *could* be solved.

Mahalanobis was neither an economist nor very actively involved with the Indian freedom movement. He was a professor of physics and statistics and founded the Indian Statistical Institute (ISI). Yet he is synonymous with planning and economic development in India.

Mahalanobis studied physics at Presidency College, Calcutta¹³ and, in 1914, he completed his Tripos in mathematics, and in 1915 his Tripos in physics at King’s College, Cambridge.¹⁴ On his return to India, he worked in the physics department at Presidency College. But his main passion at the time was statistics. He was

mostly self-taught, and assisted various bodies, like the University of Calcutta, Meteorological Department, and anthropological society in statistical analysis.¹⁵ His interest in statistics sparked at Cambridge, where, just before he left for India, his tutor, W. H. Macaulay, drew his attention to the journal *Biometrika*.

The most important influence on Mahalanobis was Karl Pearson, the founder and editor of *Biometrika*. In 1926, Mahalanobis got a chance to work in Pearson's statistical laboratory in University College, London. This experience was seminal in Mahalanobis's forming ideas to set up a statistical institute in India and eventually a statistical journal – *Sankhya*. In a letter to Karl Pearson's son, Mahalanobis wrote, 'I came in touch with him [Karl Pearson] only for a few months, but I have always looked upon him as my master and myself as one of his humble disciples.'¹⁶

A sample of his correspondence in the 1920s and 1930s reflects that he was mainly discussing his research interests,¹⁷ connecting with academics abroad,¹⁸ and attempting to set up a new research centre for statistical studies.¹⁹ He did not discuss socialist ideas in depth, though he was in communication with scholars interested in socialism such as J. B. S. Haldane, Bertrand Russell, and E. J. Thompson.²⁰

This differentiated the early career of Mahalanobis from some other prominent physicists and mathematicians who had an impact on development planning. Karl Pearson, though known for his pioneering work in statistics, was a socialist and very influenced by Marx. He avowed his 'firm belief in the soundness of the fundamental doctrines of Socialism' (Porter 2010). Throughout the 1880s, he was an advocate of Marx's theory of surplus value. Pearson wrote papers in the field of economics and communicated with other economists.²¹ He was also a supporter of the Fabian Society, and his works *The Ethical Basis for Socialism* and *Socialism in Theory and Practice* were publicized and distributed by the Fabian Society.

In the 1920s and 1930s, Mahalanobis was interested in developing statistical techniques applied to explore questions of caste, anthropology, agriculture, and meteorology in India. Even as late as 1954, Mahalanobis confessed to Pitambar Pant, 'To be quite frank I am so ignorant about academic economics and my Indian colleagues are so cock-sure about their own infallibility that I had a little bit of inferiority complex about economic matters.'²²

Mahalanobis immersed himself in two important projects in the 1930s. The first was the establishment of the ISI for developing and using statistical techniques in India.²³

The second was Mahalanobis's work on sample surveys. Mahalanobis developed techniques in sampling to create surveys that would approximate the accuracy of census data. In a series of papers, lectures, and seminars, he defended the sample survey method as a substitute to the census-data method (P. C. Mahalanobis 1937,

1938, 1940). Mahalanobis's position was that sample surveys were as reliable as census data, though at a fraction of the cost.²⁴ Further, given a tradeoff between accuracy and economy (P. C. Mahalanobis 1986: 85–86), sample surveys would be designed based on the specific end goals and the budgets of the surveyor. This made sample surveys particularly appropriate as a policy tool. Both in India and globally, this was a relatively new technique. Professor Harold Hotelling at Columbia University wrote in his report in 1930–1940 that no techniques of random samples so far had been developed in the United States or elsewhere that would compare to the accuracy or the cost of Mahalanobis's technique.

Mahalanobis's pioneering work in statistical techniques was taking place against the background of some major political changes. Socialist members within the Indian National Congress were gaining prominence and Jayaprakash Narayan founded the Congress Socialist Party in 1934. These leaders' attribution of equality to socialism was so powerful that within a few years the Congress Socialist Party was more than one-third of the strength of the All India Congress Committee. In December 1938, Congress president Subhash Chandra Bose created the National Planning Committee, tasked with the job of forming an 'economic plan' for the country.

The National Planning Committee met frequently and its secretary, K. T. Shah, produced 20 volumes of papers. Nehru raised the importance of statistics to the planning endeavour in May 1940. One of the main tasks was collection of data to formulate rational, nationwide economic plans. The committee requested survey data from provincial governments²⁵ and decided to collect new data.²⁶ The task at hand was to get reliable data, at a low cost, using sample surveys.

It is in these circumstances that Nehru found an advisor and partner in Mahalanobis. They had met many times prior to 1939 through Rabindranath Tagore (Rudra 1996) but it was only in 1940 that they discussed their interest in statistics, talking till after two in the morning post dinner one night (P. C. Mahalanobis 1961). The National Planning Committee asked Mahalanobis to write a statistical supplement to the report by the Planning Committee.

It appears the discussions even in the 1940s were entirely about Mahalanobis's expertise in statistics. He wrote to Nehru in 1940 suggesting that he examine all the reports of the National Planning Committee from a 'purely statistical point of view'.²⁷

Mahalanobis was still not very interested in or knowledgeable about the exercise of economic planning. In 1954, Mahalanobis confessed to Pitambar Pant, 'I had only very vague ideas of planning when I first came to Delhi. From January 1950, when I first started handling national income data, I began to learn.'²⁸

After being entrusted with the monumental task of formulating the plan for India, Mahalanobis went abroad on a study visit to meet with the leading

economists and statisticians in the world and reflected on what he had learned. 'I know that economists from the west cannot solve our problems. But I also know that we can use some western economists to great advantage. On the purely technical side it would be of help if we can get someone with actual experience of inter-industry analysis or linear programming.'²⁹

Mahalanobis clearly had socialist leanings and was on board with the broad message of socialism. However, his scholarship suggests that Mahalanobis's allegiance was to the scientific technique. His letters make it clear that Mahalanobis was more interested in the technical expertise – in particular, the mathematical and statistical methods to calculate plan allocations – of the economists and statisticians met rather than their economic approach (P. C. Mahalanobis 1986: 105–106).

The partnership that emerged between Nehru and Mahalanobis in the 1940s (which would eventually lead to the team writing the second five-year plan) had quite a clear division of labour. Nehru determined the ideological vision and the main goals for economic policy, while Mahalanobis was to provide the apparatus (mainly mathematical and statistical services) to operationalize the vision. This is unsurprising given Nehru's view on the exercise of planning, which he only considered a part of the socialist vision: 'Planning and development have become sort of mathematical problem which may be worked out scientifically.'³⁰

It seemed to Mahalanobis as if the exercise of planning meant simply an economy-wide problem had to be solved, where policymakers would provide the goals and the mathematicians simply had to find the most efficient way of reaching that goal with a given set of resources. Therefore, the person at the helm of the planning exercise need not know much about economics, simply about the tools required to allocate the resources centrally. It was only policymakers who needed an understanding of economics to determine the policy goals or appropriately formulate the questions and problems faced by society.

Conclusion

The ideas and events that led up to the formation of the Planning Commission of India in 1950 were in the making for about 70 years. The commission can be traced back to both (a) the very general change in ideas away from *laissez-faire* across the world in the late 19th and early 20th centuries, and (b) the very specific events and individuals in the Indian nationalist movement in India and Britain in the late 19th and early 20th centuries.

The general change in both ideology and the tools used by economists led to a very different approach involving economists' attempts to solve economy-wide problems by treating the economy as a single optimization problem. This appeared

in the adoption of planning in India, where the ideas came from Fabian socialism, but the implementation of those ideas was left to mathematicians and statisticians who had little background in economics. This led to a peculiar division of labour among policymakers and planners in India.

Finally, it is clear from tracking these ideas that it is not the case that Indian planners in 1950 sought different economic ideas in the world and adopted the best set of ideas. Instead, a series of events, some planned and some accidental, led the Fabian model to become closely associated with the Indian national leaders and eventually adopted by Prime Minister Nehru and implemented by technocrats like Mahalanobis.

Notes

1. Second Congress, Naoroji Address 1886, Calcutta.
2. Mohandas Gandhi considered Gokhale his teacher and mentor. However, Gandhi felt Gokhale was too liberal in his ideas and faith in Western institutions.
3. For a detailed analysis, see Boettke (1990) and White (2012: 32–67).
4. There are details on these organizations in the Making Britain Database – an online database providing information about South Asians in Britain from 1870 to 1950. Available at http://www.open.ac.uk/researchprojects/makingbritain/Organisation_v
5. Socialist syllabus foreword by S. P. Sinha of the Patna branch of Congress Socialist Party. Note edited by Nehru. See JN Papers, NMML.
6. Guha (2010), where Nehru's 1953 letter is quoted on p. 339.
7. For a systematic comparison of the four plans, see Nag (1949).
8. January 1939, p. 9.
9. Tugwell (1992: 138–139, entry dates: 20 and 22 October 1934).
10. For a detailed discussion of Keynes's connection to India, see Chandavarkar (1990).
11. Published in 1923 by P.S. King and Company, London.
12. Minutes to the Meeting of the Executive Committee of Laski Society 17 December 1951 (LSE Archives)
13. Mahalanobis actually went to study at the University of London. He visited Cambridge for a day and got offered a spot at King's College, Cambridge (A. Mahalanobis, 1983).
14. Roy Weintraub (2002) attributes these exams as one of the reasons for the increasing influence of mathematics and physics in economics.
15. See correspondence between Gilbert Walker and Mahalanobis between 1922 and 1927, Mahalanobis papers NMML.
16. Letter dated 14 June 1936, see Mahalanobis Papers, NMML.
17. Mahalanobis correspondence with, P. M. S. Blackett, P. O. Boddington, R. A. Fisher, G. M. Morant, Karl Pearson, L. C. Thoburn, Edward Dennig, E. J. Thompson, Arthur Linder, Sten Konow, W. Krauss. See Mahalanobis Papers, NMML.

18. Mahalanobis connected with a number of mathematicians and statisticians in the 1920s, especially during his visit to England to Pearson's laboratory and his travels to Europe with Rabindranath Tagore. As an example, see correspondence with W. Krauss in the 1920s. In 1927 H. H. King proposed and Dr M. Greenwood seconded Mahalanobis to the Royal Statistical Society. See letter from Thoburn to Mahalanobis dated 19 May 1926.
19. See correspondence with C. D. Deshmukh, Mahalanobis Papers, NMML.
20. See correspondence with J. B. S. Haldane, Bertrand Russell, and E. J. Thompson, Mahalanobis Papers, NMML.
21. In 1883, he proposed a radical economic paper for the British Association meetings, but withdrew when the Association offered him only half an hour to present what was intended as a withering critique of the English school. 'I am very sorry,' wrote John Neville Keynes, 'that we shall not have your paper on Socialism at the British Association. I should have been particularly interested in hearing you demolish us poor economists' (Porter 2010, 78).
22. Mahalanobis to Pant, dated June 1954, Pitambar Pant Papers, NMML.
23. See correspondence with C. D. Deshmukh, Mahalanobis Papers, NMML.
24. This was an important contribution to planning. In his travels to the USSR in 1954, he was advising members in Czechoslovakia and USSR on the benefits of sample surveys.
25. Questionnaire on National Planning for India: Explanatory Memorandum. 130 questions mainly for state and provincial governments to collect data to begin planning exercise (National Planning Committee 1938 JN Papers). In a meeting on 17 December 1938, Nehru calls for circulation of the questionnaire.
26. In a meeting on 17 December 1938, Subhash Chandra Bose calls for research and data collection. Specifically, he discusses how existing institutes and survey departments can be used towards the national-planning exercise.
27. Quoted in Chattopadhyay (1985: 118).
28. Mahalanobis to Pant, letter dated June 1954, Mahalanobis Papers, NMML.
29. Mahalanobis to Pant in a letter dated 24 June 1954, Pant Papers, NMML.
30. Nehru in conversation with R. K. Karanjia. Cited in Rosen (1967: 105–106).

References

- Ambedkar, Bhimrao Ramji. 1917. 'Castes in India: Their Genesis, Mechanism, and Development.' *The Essential Writings of BR Ambedkar*, ed. Valerian Rodrigues, 263–305. New Delhi: Oxford University Press.
- Bauer, Peter. 1998. 'BR Shenoy: Stature and Impact.' *Cato Journal* 18 (1): 1–10.
- Bayly, Christopher Alan. 2007. 'Rammohan Roy and the Advent of Constitutional Liberalism in India, 1800–30.' *Modern Intellectual History* 4 (1): 25–41.
- Boettke, Peter Joseph. 1990. *The Political Economy of Soviet Socialism: The Formative Years, 1918–1928*. Boston: Kluwer Academic.

- Bose, Subhas Chandra. 1934. *The Indian Struggle*. Kuala Lumpur: NSS Maniam.
- Carr, Edward Hallett. 1985. *The Bolshevik Revolution, 1917–1923*, vol. 3. New York: WW Norton & Company.
- Chandavarkar, Anand. 1990. *Keynes and India: A Study in Economics and Biography*. London: Palgrave Macmillan.
- Chattopadhyay, Raghavendra. 1985. 'The Idea of Planning in India, 1930–1951.' Unpublished PhD dissertation. Canberra: Australian National University.
- Dahrendorf, Ralf. 1995. *LSE: A History of the London School of Economics and Political Science, 1895–1995*. Oxford: Oxford University Press.
- Doctor, Adi Hormusji. 1997. *Political Thinkers of Modern India*. New Delhi: Mittal Publications.
- Eucken, Walter and T. W. Hutchison. 1948. 'On the Theory of the Centrally Administered Economy: An Analysis of the German Experiment: Part I.' *Economica* 15 (58): 79–100.
- Fisher, Irving. 1907. 'Why Has the Doctrine of Laissez Faire Been Abandoned?' *Science* 25 (627): 18–27.
- Guha, Ramachandra. 2003. 'LSE and India.' Available at <http://www.thehindu.com/thehindu/mag/2003/11/23/stories/2003112300120300.htm> (accessed on 10 April 2019).
- . 2007. *India After Gandhi: The History of the World's Largest Democracy*. London: Pan Macmillan.
- . 2010. *Makers of Modern India*. Cambridge: Harvard University Press.
- Hauner, Milan. 1983. *India in Axis Strategy: Germany, Japan, and Indian Nationalists in the Second World War*, vol. 7. Stuttgart: Klett-Cotta.
- Hayek, Friedrich A. 1944. *The Road to Serfdom*. London: Routledge Press.
- Kantorovich, Leonid V. 1989. 'Mathematics in Economics: Achievements, Difficulties, Perspectives.' *The American Economic Review* 79 (6): 18–22.
- Keynes, John Maynard. 1926. 'The End of Laissez-Faire.' In *Essays in Persuasion*, ed. John Maynard Keynes, 312. New York: W. W. Norton.
- Koopmans, Tjalling Charles. 1957. *Three Essays on the State of Economic Science*. New York: McGraw Hill Book Company.
- . 1977. 'Concepts of Optimality and Their Uses.' *The American Economic Review* 67 (3): 261–274.
- Lange, Oskar, Fred Taylor, and Benjamin Lippincott. 1938. *On the Economic Theory of Socialism*. Minneapolis: University of Minnesota Press.
- Mahalanobis, Anikendra. 1983. *Prasanta Chandra Mahalanobis*. New Delhi: National Book Trust.
- Mahalanobis, Prasanta Chandra. 1937. 'The Need of a Sample Survey of the Growth of Population in India.' *Sankhyā: The Indian Journal of Statistics*: 58–58.
- . 1938. *Report on the Sample Census of Jute in 1938*. New Delhi: Indian Central Jute Committee.
- . 1940. 'A Sample Survey of the Acreage under Jute in Bengal.' *Sankhyā: The Indian Journal of Statistics* 4 (4): 511–530.

- . 1961. *Talks on Planning*. Calcutta: Asia Publishing House.
- . 1986. *Why Statistics and Others Essays*. Calcutta: Statistical Publication Society.
- Marshall, Alfred. 1907. 'The Social Possibilities of Economic Chivalry.' *The Economic Journal* 17 (65): 7–29.
- Marx, Karl and Friedrich Engels. 2011. 'The Communist Manifesto,' In *The Two Narratives of Political Economy*, ed. Nicholas Capaldi and Gordon Lloyd, 397. Hoboken, NJ: John Wiley.
- Masani, Minocher Rustom. 1944. *Socialism Reconsidered*. Padma.
- Medema, Steven G. 2007. 'The Hesitant Hand: Mill, Sidgwick, and the Evolution of the Theory of Market Failure.' *History of Political Economy* 39 (3): 331–358.
- Mises, Ludwig Von. 1920. *Economic Calculation in the Socialist Commonwealth*. Auburn, AL: Mises Institute.
- . 1922. *Socialism. Indianapolis, Indiana: Liberty Classics*. London: Jonathan Cape.
- Nag, Daya Shankar. 1949. *Study of Economic Plans for India*. Bombay: Hind Kitabs.
- Naoroji, Dadabhai. 1901. *Poverty and Un-British Rule in India*. London: S. Sonnenschein.
- Nehru, B. K. 1977. 'BK Nehru.' In *My LSE*, 25. London: Robson.
- Nehru, Jawaharlal. 2004 [1936]. *An Autobiography*. New Delhi: Penguin Book.
- Porter, Theodore M. 2010. *Karl Pearson: The Scientific Life in a Statistical Age*. Princeton, NJ: Princeton University Press.
- Röpke, Wilhelm. 1935. 'Fascist Economics.' *Economica* 2 (5): 85–100.
- Rosen, George. 1967. *Democracy and Economic Change in India*. Berkeley: University of California Press.
- Roy, Ram Mohun. *Asiatic Journal*, NS, 12 (1834): 212.
- Rudra, Ashok. 1996. *Prasanta Chandra Mahalanobis: A Biography*. Oxford: Oxford University Press.
- Sareen, Tilak Raj. 1996. *Subhas Chandra Bose and Nazi Germany* (Compiled, with an introduction and explanatory notes by TR Sareen). New Delhi: Mouto Publication House.
- Shaw, George Bernard. 1892. *The Fabian Society: What It Has Done; & How It Has Done It*. London: Fabian Society.
- Shenoy, Bellikoth Raghunath. 1955. 'A Note of Dissent on the Memorandum of the Panel of Economists.' Papers Relating to the Formulation of the Second Five Year Plan, 15–26. Delhi: Government of India Planning Commission.
- Shenoy, Sudha. 2003. 'The Global Perspective: An Interview with Sudha Shenoy.' *Austrian Economics Newsletter* (Ludwig von Mises Institute, Auburn, Ala.), Winter: 1–8.
- Tugwell, Rexford G. 1992. *The Diary of Rexford G. Tugwell: The New Deal, 1932–1935*, ed. Michael Vincent Namorato. New York: Greenwood Press.
- Webb, Sidney. 1918. 'The New Constitution of the Labour Party: A Party of Handworkers and Brainworkers: The Labour Programme and Prospects.' In *Labour Party Leaflets: New Series (1)*. London: Labour Party.

- . 1920. *Fabian Essays in Socialism*, ed. Bernard Shaw. London: Fabian Society.
- Weintraub, Eliot Roy, 2002. *How Economics Became a Mathematical Science*. Durham: Duke University Press.
- White, Lawrence H. 2012. *The Clash of Economic Ideas: The Great Policy Debates and Experiments of the Last Hundred Years*. Cambridge University Press.
- Zachariah, Benjamin. 2014. 'A Voluntary Gleichschaltung? Indian Perspectives towards a Non-Eurocentric Understanding of Fascism.' *Transcultural Studies* 5 (2): 63–100.

