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Abstract

This paper will first look at the way war transformed the landscape and cityscape of Jamshedpur. This region around the city was one of the inner frontiers of resource appropriation over the course of the 19th century that turned into a military frontier during the Second World War. Wartime inflation and food shortages forced the state to recast its relationship with its subjects. The war also had a significant impact on company management policies. The paper illustrates this with presenting the issues of food prices, discipline, technical training and the rehabilitation of disabled workers.

Keywords

World War II, Asian Theatre, Hinterland, Industrial Relations, British India

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Discipline, Human Bodies and Landscape during World War II:

the case of Jamshedpur in Colonial British India

One of the most difficult summers of the Second World War, that of 1942, saw a turning point in India. At the beginning of August 1942, the Government of India felt that the public statements being made by the major nationalist, pro-independence political force, the Indian National Congress, were harming the war effort and arrested Mohandas Karamchand Gandhi (1869–1948) and other Congress leaders. This move triggered a decentralised but mass-scale upsurge in activity and fuelled a strong underground movement that remained active for many months even after the repression of the open protests, known as the Quit India movement.¹ While considerable scholarly attention has been devoted to reappraising the period and the activities of the Congress Ministries (in place between 1937 and 1939) as well as the Quit India movement, and to investigating the role of the Indian National Army and the impact of the Bengal Famine of 1943–44, little has been written about the impact of the ‘war effort’ on Indian society.²

This paper aims to contribute to eliminating this lacuna by focusing on how the region around the industrial city of Jamshedpur, located in the southern area of the Chotanagpur region and to the east of Calcutta turned into a military frontier during the

- 1 Scholars of the movement point out that the patriarchal social framework that nationalism promoted also received serious challenge during that movement. See Pandey, “Introduction”: 1–15.; Chakrabarty, “Political Mobilization in the Localities”, Tharu and Lalita, “Women Writing the Nation”. 63–64
- 2 Bhattacharya, Basu and Keys, “The Second World War and South Asia: An Introduction”, Kamtekar, “A Different War Dance.”) For the impact of World War II on the institutions of knowledge production see Sinha, *Science, War and Imperialism*

Second World War. It will first examine the way the war transformed the cityscape of Jamshedpur. It will then discuss how wartime inflation and food shortages forced the state to recast its relationship with its subjects and how the food situation interacted with the idea and practice of the scientific management of labour. I will also illustrate the latter by focusing on the issues of technical training and the rehabilitation of disabled workers.

Jamshedpur as a Military Frontier

By the late 19th century, the central and eastern zones of Chotanagpur had become the most important coalfields in India, while its southern areas were centres of iron ore and copper mining. Jamshedpur and especially the works of the Tata Iron and Steel Co. (TISCO) was the hub of turning these resources into products. In his monographic study of the history of the Tata Group, Mircea Raianu posited that rather than becoming the sole power in the region, the company manoeuvred between the legislation enforced by the British colonial state and local opposition to its need for land throughout the pre-independence period.³ Raianu points to the Quit India movement as an event that put the management and directors under pressure to take a nationalist, thus, anti-British stance even during the war. At the same time, the war was also a period demanding closer cooperation with the USA, especially in view of the foreseen extension of the capacity of the plant.⁴

At the same time, in the course of the war, Jamshedpur became a vital source of steel in South Asia that the British command wished to save at any cost. Between 1939 and 1942, the city turned into a hinterland and subsequently into a military frontier at an accelerating pace. However, these shifts did not all occur right after the outbreak of the war. In Jamshedpur, between the rainy season of 1939 and the cold season of 1941, apart from developing new products, conducting training for Air Raid Precautions and the implementation of fundraising measures related to the war, there were not many signs of the global military conflict in the region. Because of the sudden cessation of trade with Germany, the management of the plant had to delay some of the planned in-

3 Raianu, *Tata*, 55–76

4 Raianu, *Tata*, 108–118.

vestment and had to replace some German technicians and engineers, but city life was hardly affected.⁵ While the Battle of Britain was raging in the skies of England, shelters produced at Jamshedpur provided effective protection below. The army command was eager to involve TISCO in ambitious international projects. For example, it was planned that the company would provide cannons for units stationed in China.⁶ In the city, the presence of air power, the most significant strategic innovation of the Second World War, was not a novelty. Managers frequently flew between Bombay and Jamshedpur and occasionally to other destinations and an aerodrome had served this purpose since 1935.⁷ In this context, it is not surprising that members of the company management were aware that the outcome of battles would largely depend on air power, especially in the early stages of the conflict. In March 1940, A.M. Hayman, who led the delegation to the Viceroy as the Bihar Member of the Legislative Assembly and who was chief controller of TISCO, suggested that a fighter manufacturing plant should be set up near Jamshedpur. This plan did not materialize, but purchase of Spitfire fighter planes was the focus of fundraising activities in the city throughout 1940. The management was also aware that the sight of aeroplanes had a psychological impact. In November 1940, the TATA plane distributed propaganda material above Chaibasa. According to the deputy commissioner: “The appearance of the Plane and the dropping of leaflets created interest and was of immense success.”⁸

By 1942, however, fear and mobilization for the war came to Jamshedpur, too. After the Japanese military successes of 1941, Jamshedpur was not only strategically important, but also endangered. TISCO continuously developed steel and alloys used for making bombs, warships, armoured vehicles, communication and surgical equipment.⁹ As a consequence of the Japanese offensive, military units started using roads and buildings while TISCO workers built shelters, fencing and communication lines for them.¹⁰

5 TSA General Manager’s Correspondence Box no. 312 File no.173 no. 251.

6 TSA General Manager’s Correspondence Box no. 314 File no. 178 part I no. 513.

7 TSA General Manager’s Correspondence Box no. 313 File no. 174 part I no. 341.

8 TSA General Manager’s Correspondence Box no.313 File no. 175 no. 292.

9 TSA General Manager’s Correspondence Box no. 314 The Steel Company’s War Effort in 1939.

10 TSA General Manager’s Correspondence Box no. 313 File no. 173 nos. 283-287-.

During 1942, it looked very likely that the USA Air Force would establish a hospital in the city and that it would require a new air strip and aerodrome.¹¹

The cityscape changed not only due to the noise that heavy vehicles and airplanes created and the presence of barbed wire and air defence units. Fear played its part, too. The town administration opened an office that presented the tools and methods of Air Raid Protection and thousands of TISCO workers were scheduled for related training. The company provided loans for its employees so that they could evacuate their families from the city.¹² Administrative units dealing with financial and technical planning and accounting shifted to other towns in order to minimize the damage that a Japanese attack would inflict.¹³ Historians Christopher Bayly and Timothy Harper pointed out in their book on the war in South Asia that the majority of bombs dropped in the Asian theatre missed their target.¹⁴ However, as Priya Satia also reminds her readers, we should not forget that the fear of bombs had a significant impact. According to Michal Shapira's thesis, one of the most significant shifts between the First and the Second World War is that after 1940 there was no longer a stigma attached to fear. Instead, the possible ways of handling fear constituted the main problem for the authorities.¹⁵

In her book summarizing the social landscape of Bihar from 1942–44, Vinita Damodaran painted a picture in which both economic and political violence was part of everyday life. In other words, violence was no longer on the margins. In fact, management and later government reports blamed the two-week-long strike that lasted until mid-August on the Quit India movement.¹⁶ In this context it is worth noting that telegram messages mentioned delays in transmission in August and September: cutting communication lines was one of the main features of local anti-colonial resistance in 1942.

This security situation and the importance of war production made discipline a high priority. By this time, a number of bodies had been endowed with the right to legitimate

11 TSA General Manager's Correspondence Box no. 315 File no.179 part II. no. 224.

12 TSA General Manager's Correspondence Box no.314 File no.176 part II nos. 97–127.

13 TSA General Manager's Correspondence Box no.314 File no.177 part I n.108. Verma to General Manager 11th March 1944

14 Bayly and Harper, *Forgotten Armies*, 273.

15 Shapira, "The Psychological Study of Anxiety"

16 *Report on an Enquiry into Conditions of Labour*

violence to maintain order in Jamshedpur. The close attention paid to the conditions and loyalty of the 400-strong Works Guards reflects the importance of discipline and security.¹⁷ The presence of the army was a double-edged sword. Units of the Eastern Command of the Indian Army and Wing no. 171 of the Royal Air Force were stationed in the town from early 1942. The presence of the military had brought about conflicts in the city by the summer of 1942. According to a letter of complaint addressed to the general manager of TISCO, attempts of gang rape were becoming more common.¹⁸ On the one hand, the letter reflects the fact that these did not bring women to the fore. It is not women that complained but men on behalf of families worried about their honour. It is worth noting that the letter did not see the presence of the army in terms of the national interest, but only considered the importance of defending the town's families then and there. In early 1942, the Eastern Command of the Army and TISCO's management discussed the feasibility of setting up a so-called Indian Territorial Force that would have been recruited from TISCO employees. From the managerial point of view, such a body would have been desirable because of the positive impact of military training on discipline. There is some indication that this local force was actually set up during the war.¹⁹

Time was a crucial factor for discipline. Towards the end of 1939, the management at Tata decided to introduce more serious disciplinary actions in case of irregular attendance or absenteeism. It is reasonable to suppose that the controversial case of one of the employees, Lakhan, triggered this measure. Lakhan was discharged in October 1939 for irregular attendance. Although at first sight, the case looked straightforward, the Tata Workers' Union asked for an investigation. Lakhan accused the guards that accompanied him to the gate of having pushed him, humiliated him in front of fellow workers and of not allowing him to take all his personal belongings including a tiffin box with him.²⁰ The case shows that a portion of the employees still attended their job at somewhat irregular intervals in 1939, and also that physical violence on behalf of management was not an accepted practice within the works.

17 TSA General Manager's Correspondence Box no. 313. File no. 174 part I. n 252-271-. 224-250. General Manger's circular to Divisional Heads 31 January 1940, Sikh Work Guards' uniform 21 May 1940

18 TSA Box no. 314. File no. 177 part I. no. 21.

19 TSA General Manager's Correspondence Box no. 314 File no. 177 part II. nos. 304-305, 310.

20 TSA Labour Relations Box no. no. 174. File no. L-84.

The relationship between the trade unions and the management was important because of concerns about the war effort and productivity. It should also be noted that a strike or the spread of violence would have created new frontiers within a zone that had to be protected from bombs. The Defence of India Act of 1939 practically banned strikes and made mediation compulsory. Moreover, war ordinances regulating employment in industrial production applied to an increasing number of factories after each amendment. These regulations limited the free circulation of labour and thus the possibility of mass retrenchment. At the same time, inflation was becoming a serious strain on the everyday life of workers. Radha Kumar has shown that the quality of life deteriorated during the war due to insufficient food supply, rising price levels, as well as congestion on the roads and shortages of housing.²¹

TISCO's management tried to prevent the escalation of industrial conflict by introducing bonuses and employing new propaganda tools.²² In April 1942 a talk by Ardeshir Dalal (1884-1949) was the first sound that the citizens of Jamshedpur could hear on the radio. Dalal was a former director of TISCO who was very active in designing its welfare schemes during the 1930s. A dozen daily newspapers reported on the event. Significantly, the speech was a response to the Tata Workers' Union demanding a 30% rise in wages. Dalal spoke in Hindi and built his arguments around the role of the company in the war. He stated with certainty that bombing would eventually take place in the area and that there would be loss of life. He attributed anxiety on the part of employees to war conditions and warned that losses can only be minimized if everyone avoided panic. Dalal emphasized that the victory of Axis powers would bring about a world dominated by governments where real trade unions did not exist and the sole function of workers was to serve the state.²³

21 Kumar, "City lives."

22 The government made bonuses compulsory at the end of 1940 as a result of an investigation into the wages of railway employees. The Bengal-Nagpur Railways and the TISCO management regularly consulted each other regarding bonuses in order to avoid tension over wage differences.

23 TSA General Manager's Correspondence Box no.314. File no. 177 part II nos. 374-377.

Scientific Management of Labour and Food Shortages

Since millions starved to death during the Bengal Famine of 1943 and 1944, it is one of the key debates in the historiography on Colonial South Asia. One of the key questions in these discussions is how many crops the cyclone of 1942 actually destroyed and whether this was enough to cause a food availability crisis. Another concerns how far Churchill's white supremacist views led to a wilful ignorance of starvation. Arguably, one cannot answer these questions without taking a more comprehensive look at the agrarian economy of Bengal and the attempts of the colonial administration to modify it during the 1930s.

Undoubtedly, food prices were the most important sources of tensions throughout the war years in Jamshedpur, as elsewhere in the country. Considering the case of Jamshedpur, it is worth highlighting one of the aspects of the changes in colonial governance that were occurring in the period: the idea of scientific management in industry.

To start with, the report of the Bengal Famine Inquiry Commission, reflecting the strong influence of Wallace Aykroyd, stated that famines might be avoided if peasants had access to a better diet. In pursuing his agenda at the Coonoor Nutrition Laboratories, Aykroyd was a voice that represented a more genuine commitment to colonial development.²⁴ In fact, contemporary industrial surveys and texts on economic planning suggested that nutrition gained political significance during the war years in India – even if only temporarily. The discourse on economic planning at this time took food and nutrition problems seriously.²⁵ One of the key documents of this discourse appeared in 1944 and was entitled 'The Bombay Plan'. It stands out in the planning literature since the most noted industrialists of the time were among the authors and signatories listed on the front page, including J.R.D Tata and G.D. Birla. The second chapter of the Bombay Plan was an attempt to define minimum needs. Welfare concerns were integrated into this major plan of reconstruction through its focus on nutritional requirements. In numerical terms, the goal was to increase the per annum income from Rs 65 to Rs 74

24 Clarke, Sabine: "A Technocratic Imperial State?"

25 Kamtekar, "A Different War Dance"

over 15 years.²⁶ According to the report's calculations this would have been sufficient to reach the minimum standard of living. The Left wing on the contemporary Indian political spectrum refuted the Bombay Plan. Mahabendra Nath Roy called it a fascist programme on the grounds that it foresaw private industrialisation financed by the state and a large and a growing population that lives just above starvation level.²⁷

From the perspective of Jamshedpur, it is worth looking at the context of the Bombay Plan. The idea of economic planning was not a new one by the closing years of the Second World War in India.²⁸ M. Visvesvaraya's 'Planned Economy for India' had been a popular work that was published in the middle of 1930s, appearing in two subsequent editions.²⁹ This literature adopted the principle of scientific management and was eager to learn from the experience of Soviet Russia. In his work, historian Anson Rabinbach pointed out the affinity between the planned machinery imagined by Soviet planners or Trotsky and Taylor's 'and the Gilbreths' notions of efficiency, motion and fatigue.³⁰ The prominent Bengali politician Nalini Ranjan Sarkar who oversaw the Education, Health and Land portfolio as a Member of the Executive Council until 1943, wrote in his 'Economic Planning and Programme for post-war India' that in order to attain "full development of the individual for efficiency without exhaustion" economic planning needed to follow the standards that nutritional science had established.³¹ Virtually all the publications concerned with planning emphasized that industrialization must be a priority in planning. Industry was expected to relieve population pressure on the land, generate income, raise India higher in the international division of labour and bring about a transformation of the infrastructure of the country. Prominent public figures such as V. Sundaramurthy, M. Visvesvaraya and S.R.S. Raghavan wrote pamphlets drawing attention to these aspects. The Five-Year-plans of the Soviet Union were scrutinized and compared with the advances that the Planning Commission of India had made. In comparison with those goals the Bombay Plan appeared to be modest, and therefore seemed viable. However, the widely shared consensus about its objectives hides an im-

26 Thakurdas and Tata and Birla et al. *A Plan of Economic Development for India*, 12.

27 Roy and Parikh: *Alphabet of Fascist Economics*.

28 Chattyopodhyay, *The Idea of Planning*, 29–82. Zachariah, *Developing India*, 25-79.

29 Visvesvaraya, *Planned Economy for India*,²

30 Rabinbach, *The Human Motor*, 34

31 Sarkar, *Economic Planning and Programme*, 15.

portant shift. While in 1944, the opening pages of the Bombay Plan formed the point of departure for a linear argument, six years later, the eventual Draft Plan perceived food shortage as a calamity that cripples all further economic activity. Instead of making standard income one of the main indicators of the state of Indian economy, the Draft Plan plainly stated that inflation left no scope for increasing salaries.³² In other words, the post-colonial state quickly opted not to take the entitlement approach.

The price indices of the 1920s and the testimony of the deputy commissioner in 1930 show that Jamshedpur was an expensive place for food.³³ Taking the pre-war level as a base, the cost-of-living index remained at 118 in 1940, jumped from 118 to 145 in 1941 and had reached 192 by June 1942. The TISCO management introduced a scheme of dearness allowance in August 1940 that was initially a minimum Rs 2.8, was raised to minimum Rs 4 in October 1941 and then a minimum Rs 9 in October 1942 for those earning less than Rs 125. Apart from this there was an Emergency Bonus that meant an extra Rs 5 for the lower income groups and up to Rs 50 for the higher earners.³⁴ Regarding rationing, the official records are mainly concerned with the limitations imposed on petrol supplies, but they also reveal that food rations were distributed through co-operative shops throughout Jamshedpur.³⁵ Despite the noticeable archival silence about the wartime food shortage, in June 1943 a large workers' meeting sent a list of claims to the management that reveals that there was indeed a crisis. They talk of the "extreme gravity of the present food position of the industrial workers" caused by the "continuous and steep rise in the cost of living" and of a "shortage of supplies leading to the failure to ensure full supplies guaranteed under the Rationing Scheme...". The document reflects the fact that by the 1940s workers had internalized the basic principles of scientific management or at least they were willing and able to use arguments based on energy and efficiency if they believed that it might increase the chance of a positive response on the part of the management. They declared that they found it "impossible... to continue full pressure work for any length of time due to a progressive loss of energy consequent on short rations...".³⁶ As a result, TATA Steel management and the Bombay

32 *The First Five-Year Plan*. 67-74 and 186.

33 Index Numbers Showing the Rise and Fall in the Cost of Living in Bihar and Orissa 1927-28 and 1932-33 and Mr. Dain's Evidence 402-403.

34 TSA Labour Relations Box no. 152 File no. L87 n. 207-209

35 TSA General Manager's Correspondence Box no. 315 File no. 179 part II n. 230.

36 TSA Labour Relations Box no. 152 File no. L87 n. 215.

TATA central office began communicating about how to secure rations and eventually procured rice from Orissa.³⁷

Tellingly, the issue of food also outlined the boundaries of secular management during the 1940s. TISCO provided the Health and Development Survey with important details about what eating meant in the works in daily practice. According to the answers that management prepared for the uniform questionnaire there were two canteens in 1943 that provided food to Hindu vegetarians, non-vegetarians and Muslims separately.³⁸ In 1944 a memorandum about the amenities provided to the workers mentioned eight canteens within the works. This means that a fourth community had also acquired the right to have a separate menu. The space where lunch and dinner hours were spent re-enacted the communal logic of the day, hence reinforcing the culture of communal separation. This was not only the case within the factory area. A document produced by the town administration listed 24 eating places in May 1940.³⁹ These were characterized as Bengali, Punjabi and Muslim. The document, however, was mainly concerned with the needs of the middle-class visitor “who is not properly catered for.”⁴⁰

The Human Body at War: Technical Training and Rehabilitation 1940-1945

Questions of wartime training shed light on another aspect of the interaction between company management and the war effort of the central government. The Government of India paid unprecedented attention to technical training during the Second World War. The frequently amended and extended National Service (Technical Personnel) Ordinances established National Service Labour Tribunals that had vast powers to distribute skilled labour.⁴¹ In June 1940, the Ministry of Labour planned a training programme for 3000 people, although the demands of factories involved in the war effort far exceeded the preliminary calculations. In January 1945 the number of Indian citizens that had taken part in training programmes was 107 000. The Ministry of Labour also ran a

37 TSA Labour Relations Box no. 152 File no. L87 n. 217.

38 TSA General Manager’s Correspondence Box no. 315 File no. 179 part II n.230.

39 TSA General Manager’s Correspondence Box no.312 File no. 174 Part I nos. 15-16.

40 TSA General Manager’s Correspondence Box no. 312 File no. 174 Part I. nos. 15-16.

41 Tata Steel Archive General Manager’s Correspondence Box no. 313 File no. 176 part II nos. 381–387.

system that provided further training and was expected to produce 6000 graduates until September 1942.⁴² Compared to these, the scope of the most well-known programme of the period, the Bevin scheme, was negligible. That project was the idea of Ernest Bevin, the wartime British Minister for Labour and National Service. It envisaged training Indian skilled workers in state-of-the-art British industrial plants and involved 700 workers until February 1945. A series of supporting letters show that a number of Bevin trainees sought employment at TISCO.⁴³

It is perhaps unsurprising that one of the national training schools of the Indian training programme was the Technical Institute at Jamshedpur. In 1942 the company management discussed the possibility of opening a hostel for trainees studying in Jamshedpur.⁴⁴ Reports show that the number of TISCO employees registered at the Technical Institute rose from 50 to 126 between January 1941 and September 1942.⁴⁵ The extensive national training schemes inspired the TISCO management to reassess their own system of internal training. The sub-committee that the managing board set up did not support the idea of providing workers with the opportunity to receive training at foreign universities and had reservations about the use of higher education in India. Instead, the report suggested that on-site study of technologies would be of greater benefit.

The policies of the Government of India regarding technical training show that the needs of mobilization outweighed uncertainties about the potential for development in India that had been motivated by racial profiling. The prevailing thinking about racial differences assumed that in a colonial world order Indian politics, society and economy could only be modernized in the distant future. Even if there were groups that possessed important skills and there were peoples that were less distant from European populations racially, and even if there were fearless fighters, good miners and smelters with great stamina, they also appeared in archaic colours and in metaphors as brave medieval warriors. Throughout the 1920s and 1930s the literature on Indian labour emphasized the otherness and low productivity of Indian workers with few exceptions. Mass training schemes reflect the new reality that under the pressure of war government required labour that would be able to produce guns and machines for the British Empire, and in

42 Rao, *Wartime Labour Conditions*, 32-34.

43 TSA General Manager's Correspondence Box no. 313 File no. 175 nos 249-283.

44 TSA General Manager's Correspondence Box no.314 File no.177 part II no. 402.

45 TSA General Manager's Correspondence Box no. 313 File no. 175 n.286.

such an emergency there was no room for doubts. The colonies had to be developed, and rapidly. The adoption of the Bevin scheme demonstrates that the British government wanted quick and unidirectional technological transfer. In line with this vision, the masses that were not familiar with industrial work had to be trained in centres near their homes under the supervision of English trainers, while Indian skilled workers needed to acquire knowledge about new technologies that would be implemented in India.

Within TISCO, the management sub-committee objected to the idea of training being conducted abroad during the discussions about how to improve the internal training scheme. It was afraid that the glamour of the West would seduce and disorientate the trainees. On the other hand, it did not regard it as likely that workers that had been employed by the company for a number of years would be ambitious enough to leave his household behind. They implicitly assumed that Indian workers were essentially different from skilled Americans or Germans that worked for TISCO in this regard. The recommendations of the sub-committee emphasized that an increase in pay should not automatically be guaranteed to workers who complete a training course at the Technical Institute. The management perceived the increase of wages as a somewhat illegitimate demand that was nonetheless the only real motive behind Indian workers taking part in voluntary training courses. The technical training of disabled persons shows that information related to training circulated swiftly between Britain and India during the Second World War. It also reflects the role of army in the process. Agents asked the General Safety Committee of TISCO to study ways of rehabilitating injured personnel. The Chief Engineer contacted the headquarters of the Eastern Army on behalf of the committee and subsequently made a visit to the army rehabilitation centre in Pune in September 1944.⁴⁶ In the same period, one of the agents, S.H Saklatvala visited the Austin Motor Company and an exhibition on rehabilitation in Birmingham.⁴⁷ The group visiting the army centre concluded that very few of the people trained there could be employed at TISCO, but both J.R.D. Tata and John Matthai encouraged them to think of an independent training scheme. Matthai saw great prospects in employing blind people while J.R.D Tata stressed the importance of TISCO becoming a model factory in the field of employing ex-soldiers and rehabilitating employees that had suffered accidents.⁴⁸ Saklatvala's positive experience also suggested that it was possible to link grad-

46 TSA Box no. 178 part II n.27 Bryant to Agents 18 September 1944

47 TSA Box no. 178 part II n. 36–39- Saklatvala to Chief Engineer 6th October 1944

48 TSA General Manager's Correspondence Box no. 178 part II n n.19 Matthai to Ghandy 23

ual rehabilitation, the scientific management of tools and regular medical supervision in state-of-the-art industrial plants. This represents an attempt at technological transfer between metropolitan industry and TISCO in which governments were not involved. Both the report on the Pune model and the one on Austin Motors highlighted the importance of the sense of integrity and self-confidence that employment gave to disabled persons. On the other hand, the special scheme that the Eastern Army ran at Poona gave input about the limitations of such training and an idea about the methods of sharing both the financial burdens and the benefits with the Army. The TISCO management wanted the Army to cover housing costs and a small salary during the training. According to the plan the training period would not have lasted for more than three months. That much time was judged sufficient to determine the employability of the participants. The framework of the scheme reveals that its scope would have been much more limited than what Saklatvala saw at Birmingham, although management was ready to open up a new field of human resource management that considered the well-being of workers as a crucial asset. This approach drastically differed from the perception and conceptualization of coolie labour that dominated earlier discourse on the Indian and TISCO labour force.

New Landscapes: Flood Control, Energy and Development

As it transpired, during the years of the Second World War, no bombs damaged Jamshedpur and its vicinity. Other forms of destruction did occur, however: violent floods burst the banks of the River Khorkai in July 1940 and again in July 1943, destroying some of the workers' quarters (bustis). The company management documented the damages, but in their daily communication, the railway lines and the conditions of supplies figured more importantly than damage to buildings.⁴⁹ In fact, the occurrence of floods did not entirely surprise the TISCO management. The general manager's correspondence reveals that the dangers arising from the destruction of forests around Dalma Hill were known by 1938. The management suggested that the Bihar provincial government should reserve the hill area so that the smallholders that were allegedly cutting down the trees in the forest for the profit they expect from selling timber in Jamshedpur could be removed. Indeed, TISCO's management expected that these smallholders would cut

November 1944, n.21 and J.R.D Tata's note 17 November 1944

49 TSA General Manager's Correspondence Box no. 314 File no. 178 part II. nos. 51-56.

down even more trees if the new bridge over the Khorkai opened.⁵⁰ They went as far as to argue that these activities for petty gains would bring about a climatic disaster that must not be risked.⁵¹ The carefully addressed and timed application for creating a new forest reserve consciously concealed the fact that in fact its main beneficiary would be the steel works.⁵² Just as Jehangir Jivaji Ghandy (1896-1972), the first General Manager of TISCO had expected, the Conservator of Forests forwarded the case with supporting comments to the Revenue Department of Bihar.⁵³ It seems that some years passed without further action since Ghandy sent another letter to the Bihar Government in 1944 asking for “rationalization in the management of existing forest land” by which he meant the creation of reserves of private forests in the catchment area of both the Subarnarekha and Khorkai rivers. Ghandy suggested that the Embankment Act of 1882 should be applied to forests that helped with flood control, thus enabling the speedy appropriation of land. The Secretary to the Government of Bihar, Rai Bahadur B.N. Singh sent a short reply that did not promise anything. It stated that the issue of designating a reservation had been on the agenda of the local government for some time. Ghandy’s application is remarkable because of its reference to the inherent conflict between nature and industrial “civilization” that research can eventually resolve. In Ghandy’s formula, afforestation schemes devised by government bodies with the necessary expertise and a government with an innovative approach to existing legislation can remedy manmade mistakes that were the side effects of development in the preceding twenty years. In other words, in just two decades TISCO management had moved away from a view that perceived natural resources solely as treasure to be explored and exploited. Ghandy realized that industrial activity induced changes that disrupted the ecological equilibrium and that needed remedy. However, he wanted the owners of private forests and the government to pay for this cure.

Importantly, Ghandy made a link between this new approach to landscape management and the post-war reconstruction or development plans that experts, government and the Tatas themselves were drafting in the closing years of the Second World War.

50 TSA General Managers Correspondence Box no. 315 File no. 179 part II 24–36-.

51 TSA General Managers Correspondence Box no. 315 J.J. Ghandy to L.R. Sabharwal 28th June 1939 n.298.

52 TSA General Managers Correspondence Box no. 315 J.J. Ghandy to Agents’ Office 23rd June 1939 n.294.

53 TSA General Managers Correspondence Box no. 315 J.J. Ghandy to Agents’ Office 26 July 1939 n.305.

Maps that the TATA Steel Archives holds from the period from 1940-1945 show that landscape was reinterpreted within the framework of nation and development in precisely those years. The maps that visualize the “Proposals for interconnecting the Bihar electrification Scheme with Bengal” take a very ambitious perspective and show how the industrial area may be linked seamlessly to other junctures of India. The map depicts administrative and economic centres, as well as Nepal and Tibet, but topographical features are omitted.⁵⁴ This view reflects the eyes of the company management, with the interface between social and natural features being reduced to coal as a source of power. In a letter dated February 1940, the Superintendent of the Coal Department sent a long letter to the TISCO management outlining why he opposed plans for electrification that would take a provincial perspective.⁵⁵ The Superintendent suggested that the Tatas consider instead the possibility of a “general scheme of power supply” for Eastern India, possibly based on hydro-electric power.

This reveals another perspective on the dynamics and meaning of a resource frontier. The emergence of the power supply as a major issue did not only mean the ever more intensive commodification of the landscape: the resource frontier remained what it had been, but it would integrate the landscape more closely with new frameworks of power such as the nation and investment for development. This view emerged during the war, at a time when resource mobilization might legitimately override other considerations.

Conclusion

This paper described how Jamshedpur transitioned from an inner frontier into one of primary importance for the Empire that was in danger of being attacked and needed to be protected. The industrial premises, roads and air space all served this purpose. The local population was afraid both of the threat of bombing and the presence of the army. The management of the local industries introduced new norms of discipline under the new conditions demanded by the war effort and the lasting violence following the emergence of the Quit India movement. The government of India and provincial

54 TSA General Managers Correspondence Box no. 314 File no.176 part 2 n. 139-140.-A. Targuhar to J.J Ghandy 27 February 1940

55 TSA General Managers Correspondence Box no. 314 File no.176 part 2 n 122-132.-A. Targuhar to J.J Ghandy 27 February 1940

governments were tragically slow to introduce rationing during the food crisis of 1942-43, while the TISCO management tried to avoid the escalation of industrial conflict by offering bonuses and deploying new methods of propaganda. In response, one of the trade unions used the language of scientific management, citing the ability to produce efficiently as the basis of its arguments for pay increases and better conditions. Mass training programmes demonstrated the new impetus and the change in the government's policy approach to developing the colonies. TISCO also re-evaluated its internal training programme, but this assessment still took differences between Western and Indian workers for granted. On the other hand, discourse about the training of disabled persons opened up new prospects for conceptualizing labour. It also demonstrated the potential benefits of enhancing information flow between companies and reflected the accelerating contemporary developments in the metropole, the army and TISCO.

The significance of the Second World War goes far beyond the political and social history of de-colonization. The late colonial years drew up structures that foresaw the most salient conflicts of post-war South Asian society: the uncertainty of the relationship between citizenship rights and the right to security of life, the persistence of rigid vertical boundaries within society and the dominant position of large companies in determining the use of elements of the landscape. TISCO's management felt capable of mobilizing and regulating nature in its own interests within the new framework of governance dominated by the idea of development and the nation.

Archival Sources

Tata Steel Archives, Jamshedpur

General Manager's Correspondence

Labour Relations

Printed Sources

"Mr. Dain's Evidence" In *Royal Commission on Labour in India Report* vol IV/1-2 Bihar and Orissa. Oral Evidence 402-403. Calcutta, HM Stationary Office, 1929.

Index Numbers Showing the Rise and Fall in the Cost of Living in Bihar and

Orissa 1927-28 and 1932-33. Superintendent Government Printing, Patna, 1928 and 1933.

Rao, Ragunath. *Wartime Labour Conditions and Reconstruction Planning in India*. Montreal, International Labour Office, 1946.

Report on an Enquiry into Conditions of Labour in the Engineering Industry in India. Shimla 1946.

Roy, M.N. and G.P Parikh. *Alphabet of Fascist Economics. A Critique of the Bombay Plan of Economic Development*. Calcutta, 1944.

Sarkar, Nalini Ranjan: *Economic Planning and Programme for Post-War India*. Kolkata, 1944.

Thakurdas Purshotamdas and J.R. D. Tata and G.D Birla et al. *A Plan of Economic Development for India*. Bombay, 1944.

The First Five-Year Plan. A Draft Outline. National Planning Commission, 1951.

Visvesvaraya, Mokshagundam. *Planned Economy for India*. Bangalore, 1936.

Bibliography

Bayly, Christopher and Harper, Tim. *Forgotten Armies. The Fall of British Asia 1941-45*. London: Penguin, 2005.

Bhattacharya, Sanjoy, Subho Basu and Robert Keys, “The Second World War and South Asia: An Introduction”. *Social Scientist* 27, no. 7-8. (1999): 1–16.

Chakrabarty, Bidyut: “Political Mobilization in the Localities: The 1942 Quit India Movement in Midnapur.”, *Modern Asian Studies* 26, no. 4 (1992): 791–814. <https://doi.org/10.1017/s0026749x00010076>

Chattopodhyay, Raghobendra. *The Idea of Planning in India, 1930–1951*. Canberra, The Australian National University, 1985.

Clarke, Sabine. “A Technocratic Imperial State? The Colonial Office and Scientific Research 1940-1960.” *Twentieth Century British History* 18 no. 4 (2007): 453-480. doi: <https://doi.org/10.1093/tcbh/hwm017>

Kamtekar, Indivar. “A Different War Dance. State and Class in India.”, *Past and Present* 176, no. 1. (2002) 187–221. <https://doi.org/10.1093/past/176.1.187>

Kudaisya, Medha. “»The Promise of Partnership«: Indian Business, the State, and the Bombay Plan of 1944.” *The Business History Review* 88, no. 1 (2014): 97-131. <https://doi.org/10.1017/S0007680513001426>

Kumar, Radha. “City lives. Workers Housing and Rent in Bombay, 1911–47.” *Economic and Political Weekly* 22, no. 30. (1987): 47–56.

Pandey, Gyanendra (ed.): “Introduction” In *The Indian Nation in 1942*, 1–15. Kolkata: Centre for Studies in Social Sciences, 1988.

Rabinbach, Anson. *The Human Motor. Energy, Fatigue, and the Origins of Modernity*. Berkeley: University of California Press, 1992.

Raianu, Mircea, *Tata. The Global Corporation That Built Indian Capitalism*. Cambridge: Harvard University Press, 2021. <https://doi.org/10.4159/9780674259553>

Shapira, Michal. “The Psychological Study of Anxiety in the Era of the Second World War.” *Twentieth Century British History* 24, no.1 (2013): 31–57. <https://doi.org/10.1093/tcbh/hwr072>

Sinha, Jagdish N. *Science, War and Imperialism. India in the Second World War*. Leiden: Brill, 2008. <https://doi.org/10.1163/ej.9789004166455.i-278>

Tharu, Susie and K. Lalita. “The Twentieth Century: Women Writing the Nation.” In *Women Writing in India. From 600 B.C to the Present. The Twentieth Century*, edited by Tharu, Susie and K. Lalita, 43–116. New York: Feminist Press, New York, 1993.

Zachariah, Benjamin. *Developing India. An Intellectual and Social History*. New Delhi: Oxford University Press, 2005. <https://doi.org/10.1093/acprof:oso/9780195670585.003.0002>