INDIA
THE SEARCH FOR POWER
The possession of power and happiness in a greater degree makes a King superior to another, in a less degree, inferior; and in an equal degree, equal. Hence a King shall always endeavour to augment his own power and elevate his happiness.

—KAUTILYA
INDIA
THE SEARCH FOR POWER

by
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PREFACE

In writing about India's search for power I have been faced with the question of the nature of power. Power is defined as the ability to produce effects. The question is what kind of effects is India seeking to produce.

With their infinite variety and capability, human beings can create numerous and varied effects, depending upon the kind of people engaged in the process and the conditions of their functioning. A farmer produces food, an artist paints a picture, a scientist invents an idea, a business man accumulates wealth, and a king conquers territory. Some meditating sages in the remote Himalaya are said to be producing good for the whole of mankind. When together, a people may seek to pile up material goods, catapult social ideologies, build military power, and do many other things. Power can thus provide thrust to a wide spectrum of choices open to us.

In the case of India, so far as the present work is concerned, I am confining the search for power to the specific objective of attaining conditions of stability, strength, and influence. India is doing many more things other than this, of course, and probably even more significant things from a certain standpoint. But behind all its efforts, there must exist a state of stability and strength, for
without it everything can go to pieces. This state must particularly exist for a nation which after centuries of disarray and subservience has only recently come into its own and has to carry out a mighty task of reconstruction under trying conditions.

Every country exercises some influence upon others, but big countries do so more compared to small countries. Inasmuch as India has a large size and population and considerable material wealth, its outlook and operations are bound to influence not only its own people but many other peoples. Indians are interested in this. Presently, it appears, they are pre-occupied with themselves and their internal conditions and not so much with outside situations and forces. Hence they are in the first phase of their search for power.

I am aware that any reference to power is apt to conjure in the minds of some people an image of what may be called militarism. In the climate of our times, power has come to be pre-eminently associated with military power. In the present work, military power is certainly considered as a means to achieve the desired effects and objectives. Four chapters of the book are in fact concerned with it, and one of them even suggests the guidelines of military power for free India; besides, in all the remaining chapters the correlation of other forms of power with military power has been kept in view and frequently mentioned.

By a traditional trait, as I have noted in the book, Indians are generally inhibitive about military matters, and some even try to make a virtue of this inhibition. It is not proposed to argue here how ideally desirable and ethically correct this pose is, but it does not always conform to the known methods of intercourse among human beings, based as they are not only on goodwill and peace but also violence and force.

But military power alone does not make power. Power, in order to produce the intended effects, must be created in many fields outside the enclaves of the armed forces and their supporting structure. I have selected some fields which are significant enough and tried to explore them for their possibilities to produce conditions of stability, strength and influence for the country.

Accordingly, the first two chapters are concerned with India's past down to 1947, the year of Independence, and appear under
the titles of the Rise of Indian Civilization and the Impact of Islam and the West. The purpose is twofold: first, to provide a glimpse of India’s past history and civilization and its more salient features connected with power pattern, and, secondly, to remind ourselves of the base, many centuries old, on which the present generation of Indians is building itself up and from which it derives undying vitality and sustenance. The next two chapters describe India’s geographical environment and India’s position on the world map, bringing out the main features of both, the significance of the changes they have undergone, and their influence upon the capabilities of Indians. Religion and political faith as factors of power are the subject matter of the following three chapters, while the subsequent three deal with economic development and strength and the elements of economic power.

While these various themes appear separately, I have sought to keep in view their mutual connection, bring them together and integrate them at places, and then focus them on to the main subject matter under discussion in the book. I hope this will throw some light on a crucial aspect of the life of emerging India, seeking, as it is, to consolidate its newly found personality and to find a place among the comity of nations befitting its gifts of nature and culture.

M. K. C.
# CONTENTS

**Preface**

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
</tr>
</tbody>
</table>

## I  THE RISE OF INDIAN CIVILIZATION  

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Struggle for Supremacy</td>
<td>3</td>
</tr>
<tr>
<td>2. Politics and Warfare</td>
<td>8</td>
</tr>
<tr>
<td>3. Economics and Sciences</td>
<td>15</td>
</tr>
<tr>
<td>4. Religion</td>
<td>19</td>
</tr>
<tr>
<td>5. The Thirty Centuries of Indian Civilization</td>
<td>28</td>
</tr>
</tbody>
</table>

## II  THE IMPACT OF ISLAM AND THE WEST  

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Under the Muslim Kings</td>
<td>32</td>
</tr>
<tr>
<td>2. Under the British</td>
<td>42</td>
</tr>
<tr>
<td>3. India on the Eve of Independence</td>
<td>48</td>
</tr>
</tbody>
</table>

## III  THE PHYSICAL LANDSCAPE AND ITS SIGNIFICANCE  

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Northern Mountain System</td>
<td>54</td>
</tr>
<tr>
<td>2. The Great Plain</td>
<td>64</td>
</tr>
<tr>
<td>3. The Central Highlands</td>
<td>65</td>
</tr>
<tr>
<td>4. Plateaus of the Peninsula</td>
<td>67</td>
</tr>
<tr>
<td>5. West and East Coastlands</td>
<td>70</td>
</tr>
<tr>
<td>6. The Andamans</td>
<td>73</td>
</tr>
<tr>
<td>7. The Transformation</td>
<td>75</td>
</tr>
</tbody>
</table>
IV GEOGRAPHY AND POWER RELATIONS 77

1. Location and Climate 77
2. Routes of Invasion 84
3. The Question of Territory 90

V NATIONAL LIFE AND RELIGION 95

1. The Curbs of Religion 102
2. Religion and Power Impulse 109
3. Religion, A Way of Life 117

VI THE STRENGTH OF POLITICAL FAITH 124

1. The Constitution 125
2. The Novelty and Length of the Constitution 128
3. Freedom and Democracy 131
4. The Impact of Democracy 134

VII THE CONSTITUTION AND CORNERSTONES OF UNITY 140

1. The Presidentship 141
2. Union-States Relationships 144
3. Language 149
4. Military Affairs 153

VIII ECONOMIC TAKE-OFF 164

1. Trend and Pattern 164
2. Planning 167
3. The Five Year Plans 170
4. Resources 173

IX THE ELEMENTS OF ECONOMIC POWER 179

1. Agriculture 179
2. Steel 185
3. Oil 188
4. Coal 191
5. Power 194
6. Transport and Communications 196

X ECONOMIC DEVELOPMENT AND STRENGTH 204
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>XI</td>
<td>THE MILITARY LEGACY OF THE BRITISH</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>1. Position on Independence</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>2. British Methods of Recruitment</td>
<td>212</td>
</tr>
<tr>
<td></td>
<td>3. Weapons and Equipment</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>4. War Experience of Indians</td>
<td>216</td>
</tr>
<tr>
<td></td>
<td>5. Defence Organization and Strategy</td>
<td>217</td>
</tr>
<tr>
<td>XII</td>
<td>FREE INDIA AND GUIDELINES OF MILITARY POWER</td>
<td>221</td>
</tr>
<tr>
<td></td>
<td>1. Indian Genius</td>
<td>222</td>
</tr>
<tr>
<td></td>
<td>2. Influence of Geography</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>3. Technology and Organization</td>
<td>227</td>
</tr>
<tr>
<td></td>
<td>4. Impact of International Relations</td>
<td>229</td>
</tr>
<tr>
<td>XIII</td>
<td>THE ARMED FORCES TODAY</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>1. Army, Navy, Air Force</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>2. Higher Direction and Control of the Armed Forces</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>3. Arms Supply and Production</td>
<td>248</td>
</tr>
<tr>
<td></td>
<td>4. Infra-Structure</td>
<td>256</td>
</tr>
<tr>
<td>XIV</td>
<td>INDIA'S SMALL WARS AND BIG SECURITY PROBLEMS</td>
<td>269</td>
</tr>
<tr>
<td></td>
<td>1. The First War with Pakistan</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>2. The War with China</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>3. The Second War with Pakistan</td>
<td>288</td>
</tr>
<tr>
<td></td>
<td>4. Defence and Diplomacy</td>
<td>303</td>
</tr>
<tr>
<td>XV</td>
<td>EPILOGUE</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td>Index</td>
<td>333</td>
</tr>
</tbody>
</table>
CHAPTER 1

THE RISE OF INDIAN CIVILIZATION

India is an ancient country, a description applicable to its land as well as people. A part of its dry surface, the southern plateau, emerged out of the primeval waters at the very dawn of geological history, 600 or 700 million years ago. On this part the waters never advanced again, unlike some other parts of the globe which in the past were subject to periodic recession and encroachment of the sea. Then mountains arose, swamps were formed, large deltas developed, and plains appeared; these in turn gave rise to India's peculiar geography within the northern mountains and southern seas.

There are traces of human beings in India from about 400,000 B.C. In the course of millenia they learnt to make rough stone implements, polish these implements, grow plants and domesticate animals. Thus some 10,000 years ago there came into being the Neolithic men, to be followed by others more cultured.

Our past knowledge of these men is very bare. It has been suggested that there is no case of a human specimen developing into a human being in India. If that is so we, the present-day Indians, are in a way all outsiders! Some half a dozen distinct racial groups make up the ancient peoples, who came to India one after the other, mostly from across the western and partially from across the northern mountain ranges. Some very remote descendents of
these peoples are still to be found in forested or mountainous parts of India, having stunted bodies, long hair and thick lips, whose language is screams, who plaster themselves with mud, who are head-hunters or cannibals.

Compared to these tribals, who do not seem to have made much impact on subsequent events, there were others who speak today the Dravidian languages and inhabit the southernmost States, and who have always been a vital part of Indian life. Perhaps they gave rise to what is known as the Indus Valley Civilization, which flourished between 3000 and 2000 B.C. This happened in a belt which today comprises parts of Kutch, Kathiawar, Sind, Baluchistan and Punjab and the climate and geography of which must have been more hospitable then than now. Some historians say this civilization was ultimately destroyed; if that is so, the destruction must have been the earliest known, major casualty of a great human effort in our sub-continent.

How it was destroyed, by floods or by immigrants, is not certain. But one thing is clear, that this civilization marks a watershed in the life of India, between the more remote past about which we know practically nothing and the less remote past from which some kind of a story is now being constructed.

Another ancient landmark in this story occurs around 1500 B.C., when the Aryans came. Originating from the Central Asian steppes, some among these Aryans found their way to Europe, others to Turkey, yet others to Iran. Probably it was the Iranian branch which appeared in India. It was composed of many tribes, of which the Bharata tribe survived as the most prominent. Bharatas founded their new home in the small tract lying between the Sutlej and Yamuna rivers, called Brahmavarta, and here were sown the seeds of a distinctive culture, which swept over the sub-continent by the beginning of the Christian era.

By now were laid firmly the foundations of the Indian civilization. Three features of this civilization are important for us, the peculiar Dravidian-Aryan racial stock of the people, the geography of the land between the mountains and the seas inhabited by them, and their achievements. These are the basic strands of our power pattern.

In India we are accustomed to jumping chronology. The reason is that it does not exist. We do not know precisely in what stages
and how this pattern developed, and all those factors which influenced it. But we do know that in the centuries to come two other forces bore upon it with great violence, Islam after A.D. 1000 and the Western Powers after A.D. 1400. The present situation is very largely the result of the inter-play of ancient indigenous forces with these alien forces. In this and the succeeding chapters we shall trace them and examine their mutual impact down to Indian Independence in 1947. The present chapter will deal with four themes of the ancient period up to A.D. 1000 namely, the armed struggle for supremacy, politics and warfare, economics and sciences, and religion.

1. THE STRUGGLE FOR SUPREMACY

While founding no large kingdoms, the Aryans expanded eastward to the borders of Bengal and southward through the Central Highlands into the Deccan. Hastinapur, now in ruins 60 miles from Delhi, flourished probably around 1000 B.C. In the course of their march they came across various indigenous tribes and peoples; some of whom were subjugated but others held their own. A Buddhist text enumerates 16 states by the sixth century B.C., that is, about the time the Buddha was born, extending from the Kabul valley to the River Godavari; and one of them, Magadha, was to become the seat of India's greatest indigenous empire.

Here the narrative may be permitted to flow into two channels, one concerned with foreign invasions and the other with internal wars. On the north-west of India, the two channels coalesce.

For a thousand years, till about the middle of the sixth century A.D., India was invaded by various peoples from the north-west. The Persians under Cyrus the Great (558-530 B.C.) were among the first to come. Their rule, which embraced the Indus Valley and parts of Rajasthan and Punjab, lasted for a little over a century and a half. Then there arose a dozen independent kingdoms on the borderland, mostly at daggers drawn with one another, and it was through them that Alexander the Great marched in 327 B.C.

Alexander campaigned in Punjab and Sind for two years, winning battles, conquering kings, founding cities, but subjugating no territory; he could not go beyond the River Beas. On his pre-
mature death in 325 B.C. his dishevelled empire was divided. The Indian portion as well as the Kabul valley fell to the share of one of his generals who ruled from Syria, and this whole region was wrested from him by the Indian King Chandragupta Maurya. The Greeks still held foothold north-west of the Himalaya from where they raided Punjab and Sind down to 161 B.C. But they founded no kingdom, although they left their mark in the shape of coins, the art of making exquisite sculptured faces and the science of astronomy.

One of the causes of the extinction of the Bactrian Greeks was the rise of the Scythians, a conglomeration of various tribes of Central Asia. They fanned eastward to devastate China and south-eastward to overrun India. Three of these tribes, Sakas, Pahlavas and Kushans, descending in succeeding waves, captured a large part of Indian territory embracing what are West Pakistan, Malwa, Kathiawar, much of Uttar Pradesh and a portion of the Deccan. With Kanishka, the great Kushan, we come into the Christian era. He ruled over all western half of northern India and his dominions touched the frontiers of China beyond the Pamir. Having turned a Buddhist, he was thus able to propel Buddhism to Central Asia and Japan.

It is certain that by now at least some outsiders were ceasing to be foreigners in India, having adopted it as their country and professing Buddhist or Vedic faith.

There were more invasions in the centuries which followed the days of Kanishka. Among the most devastating were those of the Huns, of probably Turko-Mongol origin from Central Asia, who burst through the north-western passes in the middle and again at the close of the 5th century A.D. For three decades, till A.D. 530, north-west India was ruled by two Hun kings, but after them the Huns were overcome.

By adopting the Indian faith and propagating it in foreign lands, the Scythians did yeoman’s service, but more portent was the fact that they became the leaders of those emigrants of Central Asia who descended and tramped upon the Indian plains again and again, beating down the local population, wresting territory and founding kingdoms. They were the precursors of such distant conquerors as Babar, 1500 years away, who founded the Mughal empire.
The rise of Indian civilization

We must now shift our focus back again to the middle of the millenium before Christ to see what was happening inside India. By the time Gautama Buddha had become The Enlightened (530 B.C.) and was sending out his first sixty disciples with the injunction “Go ye now, and preach the most excellent law,” and by the time the Persians were making their first inroads into India, great changes were taking place in the political landscape of interior India. The most notable event was the shift of indigenous power to the east, as if under pressure from the west.

In the east, Magadha, a tiny state in Bihar, not yet completely Aryanized, rose to an imperial status, inspired, it seems, by the expansionist examples of the Persians. The Magadhian empire grew and by the 4th century B.C. controlled the Ganga valley as also a greater part of the rest of north India between Punjab and Bengal; it was based upon the great capital city of Pataliputra, modern Patna. Chandragupta Maurya (316-292 B.C.) was its first great emperor and Ashoka (c. 269-232 B.C.) was the third. Stationed in Chandragupta’s court, Megasthenes, the Greek, has left a most revealing document of the time. Ashoka is the greatest of Indian kings from the viewpoint of large territory, character and depth and range of influence. His conquests included Afghanistan and the whole of India except the extreme south and east.

Conquests meant warfare and suffering, and these made him turn a pacifist Buddhist. One of the first things he did then was to renounce aggression. Buddhism became a state religion which was propagated by means of missionaries as well as written injunctions. Forty of the royal sermons are still found graven upon pillars, rocks and caves throughout India. Ashoka did not disband the armed forces; the wild frontiersmen in particular had to be kept down by force. But his pre-occupations with *ahimsa* or non-injury whittled down the early Magadhan belief in the cult of power. An empire, unsupported by power and howsoever well supported by religious faith and noble deeds, could not last and in fact broke down soon after Ashoka’s death.

The Bactrian Greeks were not the only people who knocked the Mauryan state into pieces. There were the hostile indigenous kings also. Among them were the Satvahanas who came to power around 220 B.C. at the mouth of the Rivers Godavari and Krishna. They ruled, with the usual vicissitudes of victories and defeats, for
nearly four centuries, and were among the Indian kings who resisted violently the incursions of the Scythians. There were kings in Kalinga, Kanchi and north Kanara, and also in the extreme south where the three Dravidian kingdoms—Chola, Kerala and Pandya—have been mentioned by Ashoka as the scene of his righteous victories.

By now Aryanization of the whole sub-continent was complete, although perhaps the Dravidian heroes still retained some of their wild roughness in contrast to the refined warriors of the north. They conquered northern Ceylon and occupied it for many years, launched expeditions to South-East Asia and had close contact with Egypt and the Roman Empire. Above all, although warring among themselves, they were off the beat of incessant onslaughts from the north-west.

A spell of darkness falls over Indian history after the death of Kanishka. For a couple of centuries, it seems, foreigners ruled in the north-west, while the region east of Punjab and Malwa was under Indian kings. A clearer outline of events is available with the advent of the Gupta dynasty in the first quarter of the 4th century. Under the Guptas, Pataliputra once again becomes the seat of a great empire, which in its heydays under Chandragupta II (415-455) extended over all north India except the north-west. In his court flourished Kalidas, the great poet, and to his kingdom came Fa Hien, the Chinese pilgrim.

Now we are in a maze of kingdoms and wars.

Half a century later another empire was carved under King Harsha (c. 606-646), smaller than its predecessor, and yet with its own splendours, as reflected in Kanauj which remained a great city for four centuries till the coming of the Muslims. Hiuen Tsang visited India during Harsha’s reign. For two centuries after Harsha, the region between Punjab and Bengal was in a state of disintegration. Kanauj was raided by the kings of Kashmir as well as Bengal.

Two great dynasties, the Palas of Bihar and Bengal and the Gurjara Pratiharas of Kanauj, shared the hegemony of northern India during the eighth and ninth centuries. Dharmapala (c. 770-810) was one of the greatest Pala kings. Under him and his son there was a violent triangular contest between the kings of Bengal, Doab and the Deccan. Pratiharas of Kanauj raided the Pala
territory generation after generation, although without making permanent annexations. In A.D. 1023 Bengal bore the brunt of an attack of Rajendra Chola I of the Tamil country. Pala supremacy in Bengal was finally destroyed in the middle of the twelfth century by another dynasty called the Senas.

By A.D. 836 the Pratiharas were paramount in the Ganga doab, having defeated the Palas and established themselves in Kanauj. Two of their kings, Bhoja I (c. 840-885) and Mahendrapal (c. 885-910), waged successful campaigns, but were weakened by the repeated onslaughts of the Rashtrakutas of the Deccan. In A.D. 916, Kanauj fell to the Rashtrakutas. The Pratiharas recovered it but never recouped their strength and were thus incapacitated from countering the fresh dangers which were looming up on the north-western horizon.

Even though not insulated from the north, the history of the peninsula took a distinctive course. Power centred in the Western Deccan and the Coromandel Coast; and the peninsular history is very largely made up of the rivalry and clashes between the kings occupying the two seats of power. Two important dynasties of the south were Chalukyas of modern Mysore and Pallavas of Kanchi, now Conjeevaram.

Pulakesin II (c. 609-641), the greatest Chalukya king, waged war against the conquering Harsha, whom he resisted successfully, and Narasimhavarman of Kanchi, by whom he was defeated. The Chalukyas were divided into two branches, one of which was overcome by the Rashtrakutas, who, as we have noticed, campaigned incessantly against the north. The Rashtrakutas were in turn defeated by another branch of Chalukya line in A.D. 973. During these many centuries there was a fierce struggle between the Chalukyas and Pallavas, but the latter were finally destroyed by the Cholas of the south towards the end of the ninth century.

Submerged by the Pallavas for centuries, the Cholas now rose to power and ruled over the Coromandel coast and parts of eastern Deccan for 300 years, beginning from about A.D. 870. Under two of their greatest kings, Rajaraj I (985-1014) and Rajendra I (1014-1042), the Chola empire reached its zenith. Ceylon was conquered, armies marched overland right upto Bengal, and expeditions sailed as far away as Burma, Malaya and Sumatra. Two forces however continued to press against the empire, one from
the north under the Chalukyas and the other from the south under the Pandyas of Madurai, who wanted to be liberated from the Chola rule. The Cholas fell in the 13th century, and the entire south was exposed to Muslim onslatta under Ala-ud-din Khalji.

As we come to the close of the first millennium after Christ, we find that the country is divided into many kingdoms. There is no single central authority and struggle for supremacy goes on. Foreign invasions have also not ceased. On the other hand, foreign elements have been absorbed and a composite civilization has emerged. It is this civilization which confronts Islam, militant and not yielding. The power struggle acquires new dimensions.

2. POLITICS AND WARFARE

How did Indians rule and how did they fight?

From the Mauryan rulers to the Chola rulers, from the fourth century B.C. to the twelfth century A.D., which covers the period of ancient and medieval India, twelve main dynasties ruled the country, comprising in all about 250 principal kings and princes. They did not follow a uniform type of governance, but did have similar political patterns and guidelines which can be gleaned from a number of sources.¹

During the period 1500 B.C. to A.D. 300, kingship was the usual form of government, although, in the later period and only in parts of north-west India and east India (both not fully under Aryan domination), a few republican constitutions existed. But thenceforth kingships were the rule without exception. For centuries the Brahmins had been cultivating and glorifying royalty. The subsequent years only underlined its necessity, for the times were troubled, and if the kings made themselves indispensable or assumed full powers, it was understood and supported. Pomp and show, with which royalties enveloped themselves, were the additional tools to prop their status and position.

¹These include:—(i) Religious treatise comprising Vedas, teachings of Brahmins embodied in Sutras and Shastras, Mahabharata and Ramayana. Of the Shastras, the laws of Manu codified two or three centuries after Christ are most famous. (2) Political treatise comprising Kautilyas Arthashastra (3rd century B.C.) Kamandak’s Nitiśara (4th century A.D.), Somadeva’s Nitiśakavamrita (10th century A.D.) and Sukra’s Nitiśastra (13th century A.D.). They are all concerned with applied politics rather than political philosophy.
In the Vedic texts the king was mainly the leader of war, but after him there were kings who pretended to acquire the status of God on earth without whom the divine order would go to pieces. The Mauryans introduced the concept of empire, while their foreign successors, the Greeks and Scythians, invented most high-sounding designations for themselves. Now and again there is a mention of the contractual nature of the king's position, while satirist like Bana, King Harsha's panegyrist, even ridiculed the divinity of kings. Still, the mystique of the king figures as an inalienable feature of the political life of Indian civilization and always captured popular imagination.

Constitutionally, there was no check on King's power, which was therefore autocratic, but in practice there were built-in curbs. The basis of his position lay in religion, which could not be defied. While he presided over the state, he did not necessarily preside over society, which was more spacious than the state and had its distinctive chores. By the end of the Vedic period the four-fold division of society into castes had been confirmed and become fundamental, governed by Dharma, the sacred law. It was the duty of the king not only to protect society from aggression but also secure it in its pre-ordained, four-fold division and uphold the law. Even when in full swing, his powers were curbed; when they declined, it was the state which disintegrated and not society, which thus managed to survive the impotence or incompetence of the rulers. This is important.

_Arthashastra_ says there should always be a Council of Ministers to the king, because "a single wheel cannot turn." It could be appointed or dissolved by the king, but no Hindu king was ever without one. On occasions it could even be assertive for there are instances of its deposing the king or objecting to policy measures. Its defect was not that it was the king's tool but that it tended to perpetuate itself by inheritance, a fact illustrated as late as the seventeenth century by the Maratha ministers ousting their masters and taking control of the state. _Arthashastra_ also lists a large number of officers of the state, and the inscriptions of the imperial Guptas, the Western Chalukyas and the Pallavas provide evidence of a widespread bureaucratic system.

In the Vedic polity, two popular assemblies, the _Samiti_ and the _Sabha_, also existed, enjoying the right of freedom of debate. The
Samiti, or folk assembly, was sufficiently important, but it could not be considered a sovereign body and in any case disappeared in the post-Vedic period.

Division of the kingdom depended upon its size. The large kingdoms were divided into provinces, districts, towns and villages; and it was at the lower levels that the people were to some extent associated with administration. Gupta inscriptions mention city councils, which the district officer consulted before making decisions. Much more active than the city councils were however the village councils, which, though not officially recognized till at least the Chola times, were an indispensable feature of rural life and flourished irrespective of the rise and fall of dynasties. The nature of their work varied; narrow in the north, because of recurrent dangers, it was intensive and extensive in the south. Qualifications of members as well as methods of election and working were laid down. The councils were responsible for village sanitation, gardens, tanks and irrigation and collection of revenue. Since villages were liable to raids, one of their tasks was to organize local defence.

In wanting to be kings, the ancient Indian kings were no different from their counterparts elsewhere. There are instances of conspiracies and murders to eliminate rivals at the time of accession to the throne. But some aspects of their lives and deeds would be considered characteristic and looked upon by millions of Indians today with nostalgia. Some kings would abdicate after a certain age, as prescribed by Dharma, and retire to the jungles. On religious festivals, they would open their treasury and distribute riches to the multitudes who gathered. And there were kings who bowed to the wishes of the priest or the public, even if it meant giving up the throne. In their religion they had something which they shared with and by which they were tied to the peoples of the land, who did not run the government but understood its main-springs.

Warfare

Warfare in ancient India was not only a part of the political system but also of the religious and social systems. Indra, a pre-eminent divinity of the early Vedic period, is a god of war. War
is woven into the fabric of the two epics, *Mahabharata* and *Rama-
yana*, while in the *Gita*, warrior heroes are promised a straight
course to heaven. The warrior class, *Kshatriyas*, form one of the
four divisions of society. Kautilya prescribed eight elements of the
sovereignty of state—the king, minister, country, fort, treasury,
army, friend and enemy; three of them are directly connected
with warfare. "Without the army", writes Sukra, "there is neither
kingdom, nor wealth, nor prowess."

At least in the early centuries the philosophy of war was con-
ditioned by the prevailing realities of life. The very expansion of
Aryanism required an aggressive spirit, which had to be kept alive
in order to ensure security against internal tribal factiousness and
external dangers. Every king was aware of this, and was there-
fore an outstanding warrior almost without exception. The his-
tory of the period is blazoned with the trail of warrior kings, Porus,
Chandragupta and Ashoka Maurya, Samudragupta, Harsha of
Kanauj, Lalitditya of Kashmir, Dharmapala of Bengal, Bhoja of
Madhyadesh, Pulakesin of the Deccan and Rajendra of the Cholas.
Wars took place in every part of the country, among the kings of
the south as well as between those of the south and the north. The
southernmost Chola kings carried their militarism overland
upto Bengal and across the sea to Ceylon and the islands of South-
East Asia. Military exploits were inscribed on pillars, became the
subject-matter of songs and were supported by the very heavens
whom the resourceful priests invoked.

Traditionally, the ancient Indian army was composed of four
elements, the chariot troops, the elephant troops, the cavalry and
the infantry. *Chaturangabala* was therefore used to express this
four-fold division, although changes took place in the actual com-
position. The chariot, pre-eminent in the Vedic period, lost ground
by the close of the pre-Christian era, and is heard of very little
after the Gupta period. As a two-wheeled light weapon, drawn by
two horses, it was fast and mobile, but its mobility was hampered
when it acquired four or eight wheels and four horses; over ground
soaked with rain, as during the battle between Porus and Alexan-
der, or pock-marked with shrubbery or pits, it was ineffective.

By the time of Alexander the chariot had yielded the pride of
place to the elephant, the military training of which became an
art in India unexcelled anywhere else. It was useful, to quote
Kautilya, for "marching in front, preparing the roads and camping grounds, protecting the sides, standing firm, forming an entrance into impregnable forces, breaking a compact army, destroying the walls, gates and towers, and for carrying treasures." But it was slow-moving, vulnerable to horse-mounted archery, and dangerous to friends and foes alike when wounded. The Indian kings, however, carried on with it as long as they could, and some of them employed it, very ineffectually, against the Muslims.

Although a great favourite of the Aryans, the horse was not used for cavalry during the Vedic period, but at least from the sixth century B.C. it began to be introduced into the armies. As many as 10,000 horses were pitted against Alexander, while the army of Chandragupta had, according to Megasthenes, 30,000 horses. With the coming of the Scythians, the horse rose into prominence and in the days of the Guptas acquired a distinguished place in army units. Prithviraj is said to have put 200,000 horses in the field. But horse was a gift of Central Asia and the Middle East and horse-breeding never developed properly in India. This remark is also applicable to cavalry tactics; during the Greek, Scythian, Hun or Muslim invasions, Indians were all along the line a step behind time in regard to the use of bow and arrow, lance or sword from horseback.

The infantry, even though numerically the largest, was not the most important arm of the army. The foot soldier's duty was to fight in the battlefield, but to this were added other imperative functions such as protection of the warriors in chariots, on elephant or on horseback, and transportation of weapons. He was well equipped but not so well as the other troops. A great variety of battle formations has been mentioned in the Mahabharata, to which subsequent writers must have made additions in the light of experience. But not much is extant to illustrate that Indians had thought about the subject as deeply and scientifically as had the Greeks about the phalanx and the Romans about the legion.

References to sea navigation occur in the Vedas and epics, and it has been suggested that the vessels in which Alexander sent back a part of his army were Indian made. Kautilya mentions navy as a part of the Mauryan military organization, though not much can be gleaned about its employment. From the second to the seventh century A.D. Indians, particularly those in the south-
eastern part of the country, took to sea-faring on a large scale, which led to the formation of Indian colonies in modern Malaysia and Indonesia. It seems that during this period ships, no doubt constructed indigenously, were essentially for purposes of transport and could not be classed as men-of-war. The Chola kings developed a vigorous naval policy. This was done with fighting ships, but again the entire technique, embracing the technical skill and battle tactics, was short-lived.

By and large, maritime adventure was subservient to the adventures on land. Most of the Indian foreign trade took place in foreign ships, while the people at large not only kept away from the waters but developed superstitions about travel abroad; till recent times Indian mothers warned their children against getting polluted by contact with the people overseas, who somehow fell into the category of the untouchable.

The Indus Valley Civilization provides evidence of axes, spears, daggers, maces, slings, and bows and arrows, all made of copper and bronze. Swords appeared about the mid-Vedic period which later on developed into a terrible, two-handed weapon. The bow, rated as a very powerful instrument, was most highly prized throughout the Hindu period. Poisoned arrows were known and employed. The charioteer used javelins, spears and bows as occasion demanded. The riders on elephants used bows, missiles, knives, stones and even pots of oil to be showered on the enemy; later on only lancers or archers were the fashion. The cavalryman carried bow and sword and, later on, spear. Indian soldiers employed incendiary missiles, fireballs and fire-arrows, made with some inflammable material of which the Arthashastra gives a brief formula, but it is doubtful if they had any knowledge of gunpowder or firearms. The science of fortification was well-developed, and from at least the Mauryan times ballistas, battering rams and siege engines of various kinds were known. Castles and forts were in fact a most important feature of the Indian landscape.

It is indisputable that Indian kings understood the value of military power, developed military science and art, and built large armies. Since warfare was recurrent, armies must have been kept in a reasonable state of efficiency; they were led by generals or kings themselves, and were not lacking in military spirit. How then do we account for the defeat of ancient and medieval Indian
kings repeatedly at the hands of foreigners, from the Persians in
the sixth century B.C. to the Muslims in the tenth century A.D.?*

There are some obvious fallacies in this question. Indian kings
were not always defeated. During a span of 2,500 years, there
were long periods of peace, quite comparable to the peace eras
of modern times, when invaders were kept at bay. Some Indian
rulers carried their conquest beyond the traditional borders. And
all the defeats cannot be attributed to inefficiency of arms.

Still, Indians were invaded and conquered during the days of
Hindu ascendency much more than they invaded and conquered
others, and this fact has to be explained in military terms.

Behind the mighty military facade that the Indians built, some
serious deficiencies cropped up and persisted almost throughout
the period. There was too much reliance on gods to bring vic-
tory, so that at times when men should have been in the battle-
fields, they were in the temples. Partly under religious influence
and partly through an intellectual cast of mind, the Indians divid-
ed their military exploits under three headings, lawful conquests,
conquests for wealth, and conquests for destruction. The first con-
cept sat heavily on their mind, by which annexations were ab-
jured and the conquered kings were generally let off to continue
in semi-independence. Thus a large number of territorial units
grew up, always seeking opportunity to defy central control and
refuse integration. This was one of the causes of perpetual inter-
necine warfare which, in turn, had two serious effects: it led to
mutual weakening and destruction and it militated against united
action against foreign invaders.

Foreign invaders came during this period all the way from
rocky plateaus, deserts and mountains, possessed with an aggres-
sive spirit and with the resolve to do or die, employing every pos-
sible resource of morale and initiative and a powerful fighting
technique. Indians were almost always on the defensive, worried
about the sanctity of their homes and society and about their trea-
suries which were filling up at a fabulous rate, right under the
eyes of foreign visitors and adventurers. Since most of the time
they fought among themselves and almost always with similar
weapons, the science of weaponry received little competitive im-
petus and stagnated. Weapons which became obsolete elsewhere
and should have been discarded, continued to play a major role,
such as chariot and elephant; and new weapons like cavalry took long to be adopted. Because of casteist divisions, a very limited section of society learnt the use of arms; the rest even developed a revulsion for them, a revulsion sanctified by religion and accentuated by Buddhism and its aftermath.

That the flood of invasions in the ninth and tenth centuries was sought to be dammed valiantly there is no doubt, but it swept over northern India with a terrific speed, once the dam burst. The Indian kingdoms foundered in little time, which shows that the rot had gone into them deeper than could be explained only in terms of military weakness.

3. ECONOMICS AND SCIENCES

To the Indus Valley Civilization the Aryans introduced two novel techniques, the use of horses to drive chariots and the practice of farming by yoking bulls to the plough. With the coming of iron around 800 B.C., iron ploughs were made, as also tools to clear the jungles which filled the Ganga-Yamuna valley. Forest clearance seems to have progressed fairly rapidly, for as early as the fourth century B.C. Panini, a great intellectual, enjoins proper agricultural survey. Under the Mauryan regime, when power was sought to be centralized, large farms run by the state grew up. This system did not last, but during the Gupta period land grants were made to individuals as well as to institutions, particularly temples. By and large the cultivator owned the land under the overall, rather vaguely-defined ownership of the king.

Greek writers paid tribute to the fertility of Indian soil and the efficiency of the peasant who could grow two crops a year in certain areas. The land was not only fertile but also looked after. Very early the Indians learnt the making and the use of manure and the relationship between seasons and cultivation. The vagaries of rainfall were noted, hence the institution of the irrigation system, which, by the time the Christian era began, included tanks, channels and canals. Records exist of the great Girnar tank, which burst and was repaired in A.D. 455, the tanks of Bhojpur and Vijayanagar, and the canals of the Rivers Jhelum and Indus.

Barley, wheat, rice, sugar-cane and cotton were among the very earliest produce of the Indian soil. Milk and curd were lavish-
ly in demand and were an important part of the diet, so important that the cow became an object of worship and the herdsman an object of religious romance. A technique was evolved to preserve butter in hot climate in the form of ghee. Throughout the early centuries of the Christian era, pasture lands were available; and this fact, coupled with vegetarianism which prevented the killing of animals, led to an abundance of cattle. There is no doubt that famines occurred and also that the pressure on land was increasing, but famines were a local phenomenon and did not indicate overall shortage of foodgrains. The people could get enough, wholesome diet.

Mention is made in the writings of Herodotus and Ktesias (5th century B.C.) of Indian made iron-tipped arrows and steel swords. Iron mining and industry made significant progress in India, and were certainly the base of Mauryan power which was sustained by an amply equipped, large armed force. Nearly 30 monolithic columns of Ashoka's times have been found, some weighing 50 tons. These include the iron pillar of Delhi, which, even after 2,300 years, shows no sign of rusting. The mining of gold, silver, copper, lead and tin was also taken up by the Mauryas and was continued by the Guptas. During the Gupta era arts and crafts made outstanding progress, in quality as well as quantity, and we hear of cloth-making, silk-weaving, the manufacture of luxury goods and of weapons of various kinds.

It is certain that trade, internal as well as external, was a feature of the Indus Valley Civilization; internally, it was carried on among its own cities, while externally it was with the towns of the Middle East, including Babylon. Aryans were however not traders, and very likely foreign trade received a setback during the Vedic times. But from 600 B.C. it appears to have picked up again, when Aryan urban community had developed and there was a renewal of contacts between India, Persia and Greece. It was pretty brisk between South India and the Roman Empire during the two hundred years before and after Christ. The north-west part of India having been overrun by Central Asian invaders, the sea was the main channel, which became popular on the discovery of the monsoons by Hippalus in A.D. 46. Internally, trade routes were well established by the beginning of the Christian era.

Trade with the West declined somewhat after the fall of the
Roman Empire but continued unabated with the Middle East, Africa and the Islands of South-East Asia. The staple Indian exports were spices, perfumes, jewels, fine textiles and silk and iron goods. In return India wanted mostly gold. Roman gold and silver coins came in abundantly, so much so that Pliny complained of the drain of Roman gold to India in return for Indian imports.

Records show that in the early centuries India sent a considerable volume of its goods abroad in its own boats. Tamralipiti on the Ganga, Patala on the Indus and Bhrigukaccha on the west coast were some of the famous Indian ports noted for thriving trade. Ship-building was developed and ports, fitted with lighthouses, were constructed. But by the Middle Ages an aversion to oceanic enterprise was distinctly noticeable. Both the Chinese and the Arabs outstripped India in the art of naval construction, thus replacing Indian ships with their own for oversea commerce.

The scientific achievements of India were manifold. Mathematics provides an outstanding instance. After using a cumbersome notation very much like that of the Greeks and the Romans, Indians devised a simplified system of writing numerals consisting of nine digits and a zero. This system first became current towards the end of the 6th century but must have been under development in the preceding centuries. Contrary to what was once believed, Indians were the inventors of the decimal system of numerals and not Arabs, who probably took it over on their conquest of Sind in A.D. 712. Disseminated to foreign countries, this invention revolutionized knowledge all over the world.

Aryabhata (5th century) calculated the value of $\pi$ and worked out important properties of circles and triangles. Medieval Indian mathematicians Brahmagupta (7th century), Mahavira (9th century) and Bhaskara (12th century) made several advances. Bhaskara explained more clearly and accurately than any mathematician anywhere the implications of a quantity divided by zero, which is equivalent to infinity.

Astronomy progressed both in India and the West, but once India struck the new notation, it took lead in this particular field. Aryabhata suggested that the earth might be revolving round the sun and rotating round its axis. He worked out a formula to find out the increase or decrease in the duration of two consecutive days. He suggested a theory to explain variations in planetary
motions. His formula to calculate the duration of the lunar eclipse is correct, as is also that of calculating the length of the year. Indian observations were made with the naked eye, although the excellent and accurate observatories built in the 17th and 18th centuries, which still exist, may have had their models in the medieval times now lost.

Ancient India's classification of the universe into four elements—earth, air, fire and water—is no longer tenable. But there is a reference to the atom, the smallest particle, invisible, having the life of but an instant, common to all elements but arranged differently in different elements. This conception was speculative, not experimental, and yet is so closely akin to the quantum theory of Planck. Acoustics was a favourite science, particularly in its relation to music. Indian chemistry was pre-eminently directed towards medicine, with good results, and incidentally it also gave rise to compounds useful in other fields—for making stainless steel, for instance. Neither physics nor chemistry, however, went very much beyond this.

In the field of physiology and medicine, however, Indian contribution was much more substantial and lasting, having come down to the present time, in the form of Ayurvedic medicine. The bodily functions were accurately chalked, including breathing, digestion, blood circulation, the relationships of fat, bone, marrow and semen, and the metabolic process.

In the early centuries there was no taboo on contact with dead bodies, which were used for experiment. Students were also trained by means of operations performed on wax spread over a board, while hospitals which the Buddhists set up gave opportunities for the study of diseases. In the later centuries taboos on touching dead bodies were strict, so that the study of anatomy as well as surgery failed to register further advances. The compendia of Charaka (1st-2nd centuries) and Sushruta (c. 4th century) are remarkable for their detailed knowledge of physiology and medicine and are the standard texts till this day. Arab medicine was founded on translations from Sanskrit works in the 9th century, while European works written in the medieval ages were influenced by Charaka.
India's religious impulse is traceable to very early times, even earlier than the Indus Valley Civilization. We shall see now what it is, how it developed and what peculiar mental cast it generated in the context of our theme.

_The Vedic Faith_

Its principal mainspring lies in the Vedas, the great memorial of the Aryans. Veda is from _vid_, "know," and the Vedas are the repositories of divine knowledge. Composed between 1500 and 900 B.C., there are four of them, the Rig Veda being the earliest; to these were added other texts during the succeeding three centuries, including the most famous and indeed a most remarkable religious document, the _Upanishads_. _Upanishad_ means "session". Vedic hymns are addressed to gods in whose hands lies, according to the Aryans, the life of man. To propitiate them, sacrifices were conducted, in which not only material like butter was offered but also goats and horses.

In addition to worshipping gods who, taken from nature, were very real, the Aryans were also conscious of the abstract. The famous _Gayatri Mantra_ of the Rig Veda, recited commonly in India, means: "We contemplate and adore the knowledge and power of the Supreme who infuses intelligence in us". Inter-connected with this was another Vedic idea, monotheism. "He is one though wise men call Him by many names", says the Rig Veda. The Supreme was also the source of everything; and the Vedas suggest that to join the source is the goal of an individual.

These ideas form the bedrock of India's faith.

Assistance was needed to invoke gods, and to provide this there arose specialists called Brahmans. The Brahmans were the Aryans' wise men; serving as the medium between man and the gods, they became gradually the most exalted of all the professionals, versed in the sacred lore as well as the performances of sacrifices and rituals. They took their job seriously, acquired knowledge with great pains, disciplined themselves under a rigorous code of simple life, and learnt to shun material gains in order to build up moral status.
Very early in their civilization Indians hit upon the art of becoming powerful without the usual paraphernalia of power. The Brahmans as a class have thus exercised a profounder and more sustained influence upon society than kings.

The great idea of unity with the source was carried forward by the *Upanishads*. The Upanishadic teaching is that the *Brahman*, the Absolute, is identical with *Atman*, the soul: *tat tyam asi*, “You are that”, that is, the individual is the universal. It proceeds further and modifies yet another early conception governing the fate of human beings after death, called transmigration. Transmigration is the passage of the soul from one body to another in accordance with the quality of work done, the *Karma*: “As the calf would find out its mother among a thousand kine, so the deeds of the past would find out the doer”. The *Upanishads* proclaimed that this obviously painful process could be ended by the soul becoming a part of the Absolute by travelling along the path of knowledge. This then was the key to salvation.

The *Bhagvada Gita*, “Song Divine”; although a part of a later epic, was probably composed not much later than the *Upanishads*. It also projects the belief of the identity of the Absolute and the soul, with emphasis on action, but action should be unattached with result: “Your business is with action alone; not by any means with its fruit.” The *Gita* proclaims that the soul is undying, even though its form is destructible. Read by millions for hundreds of years, it is a great source-book of Indian religion.

From the coming of the Aryans down to the days of the *Upanishads* is a thousand years, which is a long period. Many things happened meanwhile. The early simple, rural life of the Aryans gave way to a more complex society; sacrifices, attended with bloodshed, began to look repugnant, and not every Brahman was a model priest. The Vedic gods were too impersonal and the *Upanishads* were too abstract for the layman. At the same time there flourished beliefs not found in the Vedas. Thus religion was charged with new impulses.

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2 There are about 150 *Upanishads*, but the most important are: *Isa, Kena, Katha, Prasna, Mundaka, Mandukya, Svetasuata, Chandogya* and *Birhadaranyaka*. 
The Dissent of the Buddha

The most revolutionary impulse came from Siddharta Gautama, the Buddha, "Enlightened One". As the young prince of a Himalayan clan, he left his father and wife for a life of seclusion, moved by the sight of old age, disease and death. When he returned to them years later, he was a wandering preacher, in dingy, yellow robes, with shaven head and the begging bowl in his hand. "The world is fast bound in fetters, I now give it deliverance", he said.

Life, according to the Buddha, must always be more or less painful, and the object of every good man is to get rid of the evils of existence and seek spiritual deliverance. To do so, faith in the Vedas, performances of sacrifices, invocation of gods, and assistance of the priests are not necessary. What is necessary is good conduct. By his conduct he better's life after life, till it needs no further betterment, till the sins, sorrows and selfishness of life are extinct. Then his soul merges into the universal soul and he attains Nirvana, "cessation".

The Buddha had no intention to found a religion, but a couple of centuries after his death Buddhism did in fact become a religion. It flourished in India for nearly eight centuries after the death of the Enlightened One. Then, by A.D. 900, it faded out of India and became an exiled religion. A good many of its ideas were taken over by Hinduism which also adopted Buddha as its ninth Avatar, "incarnation."

Meanwhile, Buddhism had made its contribution. It ironed out some of the crudities of the Aryan faith, and, along with other additions, gave rise to Hinduism. The Buddha was a missionary who talked to people with a propagandist zeal and in a democratic spirit. Hinduism, however, never imbibed this technique, which explains why it spread very little beyond the frontiers of its birth. In seeking to eliminate class distinctions, Buddhism attempted to promote social unity 2,500 years before Gandhi, but did not succeed. Gandhi's problem was almost the same as that of the Buddha; every revivalist of Hinduism, in fact, starts with the same problem—how to reassert the brotherhood of man.

But we must now go back to the second half of the first millennium B.C. and see what happened to the Vedic faith. Apart from the Buddhists, chalking out a different path of faith for
themselves, there were others following religious practices which were not Vedic. Some paid homage to objects of nature; these objects have since multiplied, embracing animals like cows, serpents and monkeys, various trees, plants and rivers, lakes and mountains. There were others devoted to the images of gods and goddesses, which again are not of Vedic origin; Siva is one such god. Icons of Siva have been found among the relics of the Indus Valley Civilization, some in yogic pose, suggesting that yoga also is a pre-Aryan form of discipline. Besides, there were ascetics who preached through a curious maze of wisdom, meditation, and self-torture, quite different from the Brahmins. There was also a section of the population besides the Buddhists which practised non-violence, which is strictly outside the pale of Vedic beliefs.

The Evolution of Hinduism

The Brahmins did not fail to take note of the winds of change and embarked on a three-fold task, to bring about the synthesis of various faiths under the main Vedic impulse, to popularize the synthesised faith, and to provide it an intellectual basis, a philosophy.

To begin with, Siva was identified with the Aryan god Rudra, after which his popularity was rapid and widespread. It expanded during the times of the Mauryas, the Guptas and Harsha, and in South India attracted a great following in the reigns of the Pallavas and the Cholas, when a large number of temples were erected to Siva’s worship. From the early centuries of the Christian era the Saivite cult also found its way to the countries of South-East Asia. Vishnu was the second god popularized and gave rise to the second great religious sect, Vaishnavite. A preserver of the world and residing in the highest heaven, he takes a human form called Avatar. And there have been nine Avatars so far, including Krishna, Rama and Gautama, and the tenth and the last is yet to be born.

The Vaishnavites do not deny the existence of Siva, nor do the Saivites deny the existence of Vishnu; but each has considered its own god the high one. The common belief that the ultimate divinity is one, that gods only reflect its many faces, and that the worship of all gods leads to one and the same goal, made the followers of the two sects fairly tolerant towards each other.
Around Vishnu and Siva centred the Bhakti movement. The Upanishads laid stress on knowledge, the Gita on action, and Bhakti on devotion. In its form as well as attachment to the two gods, Bhakti is considered of non-Aryan origin though later on it was accepted by the Brahmans. The essence of Bhakti is the close, personal relationship of man and god, and the mutual love of one for the other.

Vishnu’s incarnations also became objects of devotion, particularly Rama and Krishna. In South India, where the Bhakti movement is said to have originated, there grew a large number of saints called Alvars who carried the impulse forward; the last of these saints was in the 8th or 9th century. Later on Bhakti philosophers also grew, like Ramanuja (? 1017-1137). The movement spread northward and produced more devotees like Mira Bai (c. 1504) in Rajputana and Tukarama (17th century) in Maharashtra. Mathura and Bengal were other centres of Vaishnava Bhakti under Vallabhbhacharya and Chaitanya respectively.

The Saiva Bhakti was less widespread but no less intense. The early Saiva literature called Agamas was supplemented by the devotional songs of Nayanar saints and completed by the 14th century; the fourteen texts which thus emerged are the great reservoir of devotional hymns. The movement spread to Kashmir and in the 12th century led to excesses through the Lingayata cult.

As compendia of popular religion, and as sagas of ancient kings, heroes and sages, the Ramayana, Mahabharata and Puranas are the most outstanding.

The Ramayana, (“Adventures of Rama”), in its present form of 24,000 verses, was composed over many centuries and is the creation of numerous sages, philosophers and poets. The initial effort probably began in the sixth century B.C., while the story includes materials dating back to 1000 B.C. or even earlier. The Mahabharata, (“Great Bharata”), was also composed in its present form of 100,000 verses—the longest of the world’s poems—over many centuries by many writers. Its composition began perhaps a little later than the Ramayana but some material is even older. The 18 Puranas, “Old”, were probably compiled during and after the Gupta period. Again the material is much older. They run into 400,000 couplets, all in verse, in the form of a dialogue
between the exponent and the enquirer, aiming to deal with creation, destruction and renovation of the universe, genealogy of gods, the reign of Manu, and the history of the kings of the Solar and Lunar races.

Twelve schools of philosophy developed in the trail of the Upanishads, six orthodox, six heretical. Of the latter, four were Buddhist. The common thing in them is the spirit of enquiry into the individual, the world and the ultimate, and concern with salvation; all are theological as well as philosophical. The heretical schools do not accept the authority of the Vedas, but the orthodox schools do, directly or indirectly.

A Chinese pilgrim visiting India in 640 noted that Brahmanism was in the ascendent whereas Buddhism was in decline. Actually much more than this had happened. Many of the Buddhists as well as pre-Aryan ideas had been incorporated into the Vedic faith, which had spread all over the country backed by numerous commentaries and philosophies. The Vaishnavite and Saivite sects were well established. The two epics had been composed and the Puranas had begun to assume their present form. Worship in one form or the other had become the generally accepted mode of seeking God. A large Scythian population had settled down in the country, duly divided into castes and merged into the original Aryan stock. This was indeed the age of synthesis and birth of what has come to be known as Hinduism.

Henceforth the religious impulse was carried forward in the name of apostles and saints, some born before and others born after this great landmark of Hindu history. Between the 7th and 10th centuries were composed the eleven sacred books of the Tamil Saivites attributed to sixty-three teachers. The Tamil Vaishnavites produced a collection of hymns during the same period attributed to eleven saints. Kumarilas, the philosopher of Vedanta, came in the 8th century, followed by the still greater philosopher and saint, Sankara of Malabar (?788-820) who popularized Vedanta into a national faith. The Vishnu Puranas were composed around the 11th century and became the inspiration for Ramanuja (?1017-1137). Ramanuja's influence was profound and widespread; seven hundred monasteries are said to have been erected by his followers before his death.
Religion and Society

Hindu religion was not confined to spiritual abstractions but entered actively into the everyday life of the individual and the society.

An individual aspiring for salvation had to work for it and prove himself deserving of it, and consequently had to grow physically and mentally and also develop his entire course of life in a certain manner. This manner was meticulously investigated and prescribed. There thus grew up codes of conduct, which are found in the Vedic literature, in the Gita, in the Puranas, in the laws of Manu and in the sayings and hymns of sages and saints.

Man's life was to be divided into four stages, coursing through the periods of preparation and education, household responsibilities and life of activity, retreat and service to society, and complete renunciation and meditation. Each stage was governed by its own dharma, duty, in addition to the dharmas of a general nature: ten such dharmas³ have been prescribed by Manu. Both the Vedas and the Gita enjoin yajna, "offerings;" there were five yajnas which every individual should perform, dedicated separately to gods, sages, ancestors, objects of universe, and fellow man. All forms of faith emphasize the need of discipline, which in the yoga system and Buddhism developed into an art. A large number of characters were idealized in the epics, Rama for his kingly acts, Lakshmana for brotherly affection, Sita for chastity, Yudhishtira for truthfulness, Arjuna for valour; and no Hindu misses the religious nuances of the great qualities possessed by them.

Both Aryans and non-Aryans were convinced that gods were connected with the lives and activities of men. Those who conjured the Supreme in the abstract believed that the universe had a system and obeyed an order preserved by the Supreme. Human society was thus a part of a grand, well-organized scheme, which could carry on only under the auspices of religion. This society had to be well-organized and put into compartments which subsequently came to be known as castes.

³ Patience; Forgiveness; Control of passions; Abstinence from mis-appropriating property; Cleanliness of body, mind and spirit; Control of senses; Cultivation of senses; Acquisition of knowledge; Truthfulness; Mastery over anger.
Today we are inclined to look upon this division of the Aryan society as an expression of three factors, the multi-racial character of the people, the supremacy of the Aryans in relation to the indigenous population, and a well-thought out principle of dividing work among the people in conformity with their talent and with due regard to the needs of social stability.

The Aryans, however, had no difficulty in ascribing castes to a God-ordained process. "For the sake of preserving this universe, the Being, supremely glorious, allotted separate duties to those who sprang respectively from his mouth, his arm, his thigh, and his foot," said Manu. The king was a representative of God, ruling in fulfilment of His wishes and carrying out His laws. These laws were grounded in the Vedas and other ancient religious texts; and if the king did not carry them out, or carried out heterodox laws, he was to suffer punishment after death. Strictly speaking, Hindus did not formulate a legal system in the modern sense. For that reason priests were constantly in demand not only for the performance of ritual but also to become a part of Government apparatus; almost always Brahmans were among the ministers of kings.

A large number of customs developed with religious affiliations, such as naming the children, wearing the sacred thread, sandal-paste marks by sisters on the foreheads of their brothers, all seeking well-being with divine aid. There were also festivals duly sanctified by religion, such as the celebration of the incarnation of Krishna and the victory of Rama over Ravana, and pilgrimages to a countless number of holy places connected with one or other religious memory. Lifting their gaze from the immediate environs, Hindus looked at the stars and found divinity in astronomical configurations.

In an amazing contrast to its sublime and inspiring aspects, Hinduism also developed features both unseemly and repugnant. Religion became an over-riding and overwhelming preoccupation of the people and, enveloped in symbols, began to lose its spirit. Quest for the eternal and the infinite began to tell upon the daily chores. Some temples were a glorious work of art but others were a sheer monstrosity. Idols were worshipped for what they looked, even the most frightful of them, and not for what

*Manusmriti: Chapter I, 87.*
they represented. An enormous amount of wealth went into the temples, and was the easiest object of loot by invaders.

Sacrificial offerings were not confined to butter or horses but also included human beings; and there were not only voluntary sacrifices, like Sati, but forced sacrifices of kidnapped girls and aboriginals, whose souls were somehow purified by the act.

The practice of devotion was extended to gods other than Siva and Vishnu. That the Hindus have 330 million gods, as the hard-headed Frenchman Abbe J. A. Dubois\(^5\) says, is an exaggeration, but their number is too large to be within the bounds of reason. In the hands of the followers of tantra and sakti, the devotion assumed gruesome forms. They broke almost all taboos. According to saktism, Siva is inactive; his female consort is productive and therefore worshipped. In her stern aspects she is honoured as Kali, with a hideous countenance dripping with the blood of animal and human sacrifices. The cult involves a form of worship in which men and women sit around a circle and share wine, meat, fish, grain and sex. And yoga became an instrument to acquire supernatural powers.

Buddhism accentuated the habit of non-violence and was an open invitation to the people to turn other-worldly. And while it is true that the Buddhist kings did not refrain from wars, the religion promoted by them contributed to the emasculation of the masses and dilution of the role of power in political life: a religion which gripped the hearts of half the mankind had also something to do with the making of the "mild Hindu".

Caste might have been a logical thing for the old society, but became more and more illogical with the passage of time. Pronouncements of the sages that men were equal before God and that action more than heredity should determine caste went unheeded. More and more men of one caste became insulated from those of the other. As early as the Mauryan times, the caste system had hardened and its future course been set.

The four primieval divisions of Brahmans, Kshatriyas, Vaishas and Sudras remained, but subdivisions of these began to multiply like the germs of infection. Brahmans alone got divided into four groups and each group was sub-divided into at least twenty. A large number of Rajput clans grew up, all Kshatriyas and yet

\(^{5}\) Hindu Manners, Customs and Ceremonies, first published in 1906.
each with a separate identity which often provided a pretext for mutual fights. The Vaishas developed sub-castes based upon profession, and there was no end to these between traders, musicians, potters, agriculturists and the rest. And as for the Sudras, the lowest, the despised, and the down-trodden as they were, they too had their *amour propre* and their casteism was no less strident than that of other castes. More than three thousand of these divisions and sub-divisions have been counted, each with a large number of usages, customs, beliefs and modes of worship of its own, varying from province to province, town to town and village to village.

A system intended largely to stabilize society led to the creation of a large number of units which got insulated from one another, and so an integrated society found itself disintegrated. For such a society to develop a united nationhood became all but impossible. The lower castes suffered the most, for they became out-castes, the pariahs, and the untouchables, upon whom were heaped disabilities and cruelties; and they have always formed a substantial bulk of the total population. To a very large extent, all this went on in the name of religion or with the support of religion.

5. THE THIRTY CENTURIES OF INDIAN CIVILIZATION

By A.D. 1000 Indians had traversed through 30 centuries of their articulate life. What had they done with themselves? We do not know precisely. The period is too long, records are too few, gaps are too many; for every page of this long narrative, hundreds of pages do not exist. Conditioned by the present, one could be misled about the past.

But some glimpses of what happened could be had. Having come from the north-west of India, the Aryans in conjunction with local inhabitants founded a distinctive civilization. Their principal pre-occupation was with the sub-continent. In those days, this sub-continent satisfied their ambitions and needs, so that they had little zest to go beyond the confines of the sea and the mountains. Salubrious climate, fertility of the soil, and ample space gladdened them. But these also softened them and blunted the spirit of foreign adventure. In contrast, their contemporaries abroad, particularly across the north-west, were restlessly on the move, to escape from local hardships or propelled by the good things India
promised. Again and again they banged and broke through the western gates which were neglected, or forgotten, or simply could not be held. Throughout this period, the Indian rulers were unable to stem the violent and often highly destructive incursions of the foreign element into their midst.

Nor could they settle things among themselves. The country was in fact full of kings, many as foreign to one another as to the outsiders, perpetually at each other's throat, refusing to join hands as much due to their own ambitions as to the circumstances of the time. Dynasties of rulers kept up their identities and their mutual warfare, preferring to be alone rather than merge, even if it eventually meant collapse and destruction. Conflicts increased and spread over wide areas with the passage of time. But, in confrontation with the outsiders, these conflicts neither improved the art of warfare nor the native capacity for resistance. On the eve of the Muslim onslaught, India was a split land and whether it would ever become one nation was an open question.

But it was a rich country. For a small population, it had plenty of land, parts of which were among the most fertile in the world. By virtue of its geographical location it was capable of producing raw materials which became a fashion the world over. A minimum of effort was needed to produce them, thanks to geography, so that the enervation of the people generated through living in a soft climate over centuries had to all intents and purposes little deleterious effects on the output. By the usual laws of demand and supply, internal as well as external trade flourished. Indians got sufficient opportunities for spiritual as well as mental exploration. Not only religious but also scientific achievements were of the highest order.

But, at the same time, Indians mostly depended upon raw material, and were too much satisfied, or too lax, to convert them into what today would be described as technological products. There was commerce but the spirit of adventure behind commerce declined. Indian science was based rather in the abstract, probably because it did not receive from the people the impetus for practical application. The country was wealthy but wealth was dispersed in the hands of numerous royalties and therefore not available for concerted use. And, it so happened, that the immensity of wealth was itself an attraction for foreign invasions.
The spiritual leaders did better than the political leaders. From the earliest times Indians found out what the goal of man was on earth. The goal was to identify and to merge with the spirit that pervaded the universe. This goal was the most difficult thing to achieve. It needed a prolonged effort, in fact more than one life. It needed enormous concentration, even to the point of abandoning the more tangible things of existence. Thus, "other worldliness", in natural surroundings where the pre-requisites of keeping body and soul together were easy to come by, became a characteristic of the people. For century after century, the Indian wise men were convinced that the goal was right and that its pursuit was the best course for human beings to adopt; hence they pursued it and enjoined others to do the same.

This brought some advantages. Material demands of an average Indian were reduced to the minimum. His thinking, pre-occupied as it was with the infinite, acquired extraordinary depth and range; and like the infinite embraced everything. In an age in which kingdoms collapsed, systems perished and wealth was destroyed and looted, religion never broke down and provided as it were a passage through the maze of time which anybody could travel. It was also a handy channel of mutual communication for every generation, a reservoir of common inspiration and aspiration which the people of all native kingdoms shared irrespective of their kings; the priests succeeded where the kings failed.

But there were certain lacunae inherent in India's religion. An average Indian was busy sorting out his future, seldom his present. In its sublime aspect, it was too abstract. It made little headway beyond the sub-continent, so that to foreigners the Indian religious being has remained a very peculiar kind of being. Even the indigenous population, unable to grasp its depths, had to resort to tangible aids, which multiplied beyond count and created inextricable tangles. Considered the most essential and over-ridding mode of human aspiration, the quest for the spirit took everything in its stride, the bad and the good, the material and the immaterial. It impinged upon every field of endeavour.

But even such an all-embracing, vital force as religion could not provide the answer to every difficulty everywhere. This the people did not realize. In due course they might have sorted out the problems of an unprecedented situation in which religion mat-
tered so much. But by A.D. 1000 this was too late, for there appeared a foreign power which pounded and battered the Indian faith. This had repercussions of far-reaching character on India’s life, indigenous politics and international relations.

The civilization of A.D. 1000 had its rotten patches. Some kind of an exhaustion may also have overtaken it, so that Lord Krishna in the Gita seems to have been telling not only a single individual but a whole age and a whole people to become active. But this civilization had become embedded in the soil, and had got a strong foundation, a unity, a continuity, and a power that would propel the coming generations. If attacked, it would fight back, although it was basically unfit to initiate an attack itself.
CHAPTER 2

THE IMPACT OF ISLAM AND THE WEST

1. UNDER THE MUSLIM KINGS

In A.D. 647, fifteen years after the death of Muhammad, the prophet, the Arabs invaded India near Bombay, but it was only in 712 that they could occupy Sind. Further advance into the country from this direction was halted, and in fact Sind was wrested away by the Indian rulers a century later. A little less than three centuries were to elapse before the Muslims made a more vigorous bid to conquer Hindustan. From 977, when Subuktigin, the Turk, launched the first invasion, to 1707, when the great Mughal Aurangzeb died, Muslim rule is a prominent feature of the Indian scene.

This Muslim rule of over seven centuries is generally divided into various dynasties of Turks, Afghans and Mughals whose origins lay in a region comprising the present-day Afghanistan, Iran, the Central Asian Soviet Republics of Russia, Sinkiang, and Mongolia. There were altogether nine major dynasties: the Ghazni Turks, Ghur Afghans, Turkish slave kings, Khaljis, Tughluqs, Sayyads, Lodies, Bahamanis and Mughals. Of these, the house of Ghur lasted the shortest, only 20 years (1186-1206), while the Mughals lasted the longest, 181 years (1526-1707). The last of the Mughal emperors, Muhammad Bahadur Shah II, died as a prisoner of the British in Rangoon in 1862.
The extension of territory under the Muslims began with the capture of Peshawar in 997. Mahmud of Ghazni subjugated West Punjab and at the same time carried hurricane raids inland. Wresting the Punjab from the successors of Mahmud in 1186, Muhammad Ghuri carried the conquest a step further by invading the interior and capturing the entire tract from the Punjab to parts of Bihar and Bengal. On his death, however, this was divided by his skilful generals among themselves, setting up as kings on their own account.

A reconsolidation took place under the slave kings, who ruled over practically the whole of India north of the Vindhya range. The range was breached effectively under the Khalji rulers; Ala-ud-din conquered a part of the territory in the southern shadow of the mountains, while one of his generals led expeditions down to the tip of the south touching the Indian Ocean. It was in this territory immediately to the south of the Vindhya that the Bahmani kingdom was founded. Muhammad Tughluq raided the south, but made little headway.

A period of two centuries after Muhammad Tughluq's death in 1351 is marked by the growth of splinter Muslim kingdoms, till Akbar came and chalked out an empire afresh, which included north India and part of Afghanistan. His successors carried conquests to the south. Aurangzeb's empire extended over the Indian sub-continent, excluding Nepal, Assam and the extreme south, but his authority was effective over hardly more than half of this territory.

Politics and Warfare

Muslim power in India was not static and no Muslim ruler was content with the inherited dominion. Thus wars were almost a continuous feature of Indian life for seven centuries under Muslim domination. Every one of the Muslim kings was a warrior first and foremost, from Mahmud of Ghazni down to Aurangzeb. At least one of them, Muhammad Tughluq, aspired to conquer China. Even Akbar's reign, otherwise so superb, was marked by military expeditions, while Aurangzeb spent half of his 50 year's reign in the conquest of the south under his personal command.

It is easy to organize and wage wars on a large scale for kings
who are despotic, and in general the Muslim kings were despots; under them there were viceroys and governors of provinces as despotic as they could be under despots. Theoretically, these kings kept two types of counsellors, the ministerial class appointed by the king and the learned people versed in religion; but they could only advise. The Quran, a guide in principle, was respectfully set aside in practice, which enabled the king to become Caesar and Pope in one. There was nothing like modern legislation, except perhaps the 12 ordinances of Jehangir and a digest of Muslim law under Aurangzeb’s supervision.

"Men are heedless, disrespectful and disobey my commands; I am then compelled to be severe and bring them into obedience. I do not know whether this is lawful or unlawful; whatever I think to be the good of the state or suitable for the emergency, I do"

Thus said Sultan Ala-ud-din, and he summed up the attitude of a Muslim king to the art of kingship.

Under the Turks, Afghans or Mughals the state was essentially military in character, dominated by a class of which the chief qualification and the principal value was to uphold the power of the king with the help of arms. Under the Mughals, the militarization of the governing class developed into an organized system, when every officer of the state was enrolled in the army list. He was granted a mansab, by which he was considered the commander of a specified number of troops; and, under Akbar, there were 33 grades of command, ranging from 10 to 10,000 troops. One of the main duties of the mansabdars was to supply troops in emergency, which he was to keep in readiness and often did not. False musters were a characteristic of this system; and this, coupled with the fact that the soldiers did not owe allegiance directly to the king, was a weakness of the Mughal armies.

Under the Mughals, and particularly after Akbar, nearly one half of India was converted into an empire ruled by a central authority which was more or less effective. As a result there prevailed for over a century oneness of official language, administration system and coinage, factors which contributed to a sentiment of unity. India’s overland contacts with Persia, Egypt and
Turkey, disrupted in the medieval period, were restored, while its foreign trade swelled by land as well as by sea.

Infantry, cavalry and elephants were the three principal arms of the armies during the Turko-Afghan period. Elephants were on the wane and were gradually reduced from fighting weapons to beasts of burden. Still, they were in use throughout the Mughal period, sometimes, as under Akbar, carrying cannon and musketeers on their backs to the battlefields. Babar added artillery to the traditional arms, which was certainly a battle-winning factor in his campaigns. Mughals cultivated the manufacture of guns and ammunition of various calibre. This was an art which improved with time and was in a high state of development under Aurangzeb; but it lagged behind developments in the West, so that foreigners often ridiculed the quality of indigenous pieces of artillery.

It would be incorrect to suppose that Muslim militarism did not touch the masses, for they were often uprooted, pillaged or slaughtered. But war was basically a sport of kings, in which the people were not expected to participate en masse. Thus there were opportunities for the general population to pursue their avocation even amidst the clash of armies. Areas under effective imperial control even enjoyed long spells of peace, a fact to which must be ascribed some of the outstanding artistic and intellectual achievements of the Mughals.

Money was in great demand, and no wonder; but the earlier rulers wanted it more avariciously than the later because they had practically no resources in the lands from which they had come. Plunder was therefore a device to get rich, resorted to deliberately and on a large scale almost continuously. The Turko-Afghans evolved some kind of fiscal policy in accordance with the Hanafi School of Muslim jurists, in which land revenue and taxes of various kinds figured as the sources of revenue. Half of the gross produce of land was taken by the state, reduced to one-third under Akbar. Under Akbar, with the help of Todar Mall, an efficient land revenue system was evolved, based on past Indian practices, and was continued into the British times. Customs, mint, poll tax, indemmites, and inheritance provided other sources of income.

But, by the time of the Mughals, kings had grown supremely affluent, considering that they could not only wage expensive wars
but undertake magnificent works of art and architecture, build fabulous, diamond-studded thrones and enjoy luxury which a Muslim normally hopes for only in heaven. In a marble pavilion of the Red Fort of Delhi built by Shah Jahan is inscribed the famous verse;

\[ Agar firdaus bar rue zamin ast. \]
\[ Hamin asto, hamin asto, hamin ast. \]
(If on Earth be an Eden of bliss.
It is this, it is this, it is this.)

No ruler since Shah Jahan has sung about the pleasures of the earth with such full-throated abandon and confidence.

The Influence of Islam

Islam entered India with the Arabs but was propelled by the Turks or Turko-Afghans. From the Muslim point of view this was an advantage, for the latter were more zealous, less cultured and more ruthless than the former, and were able to carry the new faith across the sub-continent with a ferocity which the Arabs, in the eleventh century at least, would have been unable to muster.

Comparing some of the sayings and thoughts of Muhammad with those of the Indian sages one would find some striking resemblances. The Quran pictures God sometimes very much like the Gita: “Vision comprehends Him not, but He comprehends all vision; and He is the knower of all subleties, the aware” (Quran VI. 104). “Acquire knowledge”, says the Quran almost like the Upanishads, “it will enable you to distinguish between right and wrong, it will light the way to heaven, it will be your friend in the desert, your society in solitude, your companion in loneliness, your guide to happiness, the sustainer in your misery, the ornament among your friends and the armour against your enemies.” According to a famous Muslim saying, there are 70,000 curtains between man and God, and it is the function of the Quran to lift them. These curtains may not be like the Hindu Maya, but, like Maya, they obstruct reality.

These and other instances could be given to show that great
religious leaders have everywhere drawn similar spiritual conclusions and made similar exhortations. But then Islam also brought ideas and practices not reconcilable with the Hindu faith. Perhaps nothing is more significant in this connection than its formula *La ilaha ilallah Muhammad—Urrasulallah*—"There is no God but Allah, and Muhammad is the messenger of Allah". It has two vital points. The first is that the attributes are transferable to nobody else; in this spiritual scheme idols have no place, not even as symbols. The second is that only Muhammad, and nobody else, is the representative of God, and this demolishes in one stroke the entire pantheon of Siva, Vishnu and his incarnations, and thousands of little gods and goddesses which Hinduism permits.

The *Quran* makes it clear that Muhammad is the messenger of God, and is not to be taken as God Himself. Man's sole function in life is to worship only God, which can be done even though He is not comprehensible. For this purpose the basic thing for a true Muslim is to accept the Islamic five-fold formula, which is to pray five times a day at fixed intervals, fast every year during Ramzan, devote one-fortieth of income for the benefit of the poor, and do the Haj pilgrimage at least once in lifetime. The next thing is to develop knowledge and finally to acquire mystic experience. The word "Allah" in conjunction with the word "hu" induces mystic consciousness.

These and other points render Islam an exclusive faith, but the *Quran* went further. In certain portions of its texts it tolerated Jews, Christians and Sabians provided they believed in Allah, in others it classified them with pagans, and in yet others it enjoined that they as well as other non-Muslims be destroyed unless they accepted Islam or paid tribute.

The most prominent thing the invading Muslims saw in India was temples, monasteries and worship centres, and they made a beeline for them not only with a view to satisfy a resurgent religious fanaticism but also to get at the hoarded wealth of centuries. Religion thus also provided a motivation of loot. When installed on the Delhi throne, Muslim kings functioned as Muhammad had functioned. "Muhammad", says the *Encyclopaedia Britannica*, "ruled over his people as a divinely inspired and guided prophet. He led the public prayers; he acted as judge; he controlled the army." Both the Turkish and Afghan kings assumed almost dic-
tatorial authority in temporal as well as religious affairs. True, there was a chief theologian to advise, called sadr-us-sadur, but he could do no better than make available the guidance of orthodox law which was so patently hostile to non-Muslims. There were forced conversions in large numbers, so pronounced that Shah Jahan, who does not have the reputation of a bigot like Aurangzeb, had to appoint a superintendent of converts. Meanwhile, Hindus were subjected to tax, public worship of Hindu idols was forbidden, new temples were not allowed to be built and old ones not allowed to be repaired, and temples were desecrated not only in celebration of the victory of Islam but also in peace time at the behest of a fitful religiosity.

There were two main exceptions to this kind of rank bigotry.

One was provided by Akbar who tolerated all religions and treated his subjects equally irrespective of faith. Under his rule temples could be built, Hindus could drive in carriages and wear rich clothes. A number of Hindu scriptures were ordered to be translated in Persian. Posts normally reserved for Muslims, like the governorship of a province or ministership, were thrown open to a selected few Hindus. In his “Hall of Worship” religious discussions were freely allowed and in the new din-i-ilahi, “divine faith”, which he sponsored, doctrines of various religions were incorporated.

The second was in respect of sufism. Sufi is from suf, “wool”, and denoted those who led a simple life by wearing woollen garments and were devoted to Truth. The central point of sufism is to discover the relationship of God to the individual and the realization of God by the individual. In practice, sufism postulated a pir, “teacher”, and a murshid, “pupil”, and adopted purification, meditation and deification as the means towards realization. This was not in conformity with Islam, hence in Iran, where the belief developed, the early Sufis were treated as heretics. These included men like Jalalud-Din Rumi and Mansur Al-Hallaj, the latter, who asserted Ana’l Haqq, “I am the truth”, having been executed.

A large number of Sufis came to India in the wake of the Muslim conquerors. In the beginning they preached Islam, winning Hindu converts by their soft-spoken manners and taking a hand in the consolidation of Muslim power. But later on they gave up
evangelist zeal, and to this class belonged Mian Mir, Dara Shukoh and Abul Fazl. The vandalism of Muslim rulers turned them more and more away from the *Quran* and what it stood for. Many were impressed by the Vedanta philosophy and Bhakti cult, and believed in Maya, Karma, transmigration of souls and even in idols.

But neither the catholicism of Akbar nor *sufism* represented the virtues of an ideal Muslim. In the Indian setting he was a proselytizer, an iconoclast, a conqueror and a destroyer, a foreigner who dominated without much compromise. For the first time Indian civilization was in confrontation rather than for conciliation and synthesis with an alien faith. Besides, the Hindus felt humiliated and were stricken by the grievous loss of nearly one-third of their co-religionists to Islam. This had happened not because Islam was superior to Hinduism but because of the military and political inferiority from which the Hindus suffered. In this manner, and for the first time after nearly 3,000 years of Indian history, religion acquired a strident political significance, which was only accentuated by the British and by the creation of Pakistan.

In a subsequent chapter we shall see how religion affects not only the social and spiritual but also the political life of India and has thereby become an instrument of power relations.

*Downfall of Muslim Power*

Among the forces which brought about the downfall of Muslim rule, one was the condition obtaining at the highest levels of government, involving the king, the court and the nobility. Through all these centuries, it was indeed dangerous to be a king. The sons of the king where they existed were the greatest source of danger, in accordance with the proverb “Princes, like crabs, eat their parents”. But even otherwise there was no limit to the king’s rivals.

Muhammad of Ghur, one of the most illustrious of the early sultans, was stabbed to death. One of the successors of Muhammad was poisoned. Of the six Khalji kings, four were murdered. Akbar died amidst the intrigues of his family and, as if that was not enough, eighty-six years later his remains were stolen from his tomb and burnt. Jehangir suffered a spell of imprisonment a year
before he died; and Shah Jahan was deposed and kept in jail for seven years before his death. Aurangzeb who rose to the throne by executing two of his brothers, died a miserable death amidst dark suspicions about the loyalty of his sons, while among his successors murder and deposition were the rule rather than the exception. Viceroy's of the provinces revolted often with the assistance of men in power at the court; and the nobility, composed of heterogenous elements of Arab, Persian, Afghan, Abyssinian, Turkish and Indian origins, never hit it off well together.

Invaders gave the Muslim rulers no respite. In the early centuries they came from Central Asia, Afghanistan and Persia, and subsequently by sea. For nearly 200 years, beginning from the thirteenth century, Mongols were almost a constant terror. After Chenghis Khan, who came only upto the Indus, they repeatedly burst through the Afghan passes for 43 years from 1245 to 1288, often joined by wild tribesmen of the frontier. When King Balban (1265-87) boasted that no less than 15 sovereigns had fled to his court from across the north-west, he was only indicating the tempestuous character of the life beyond the Indian borders. Mongols invaded five times during the reign of mighty Ala-ud-din. The 5-day massacre and loot of Delhi by Timur in 1398 has few parallels, even in the annals of Muslim depredations. The Mughals got no rest from the troubles on the north-west frontier, and Aurangzeb's successes there for a few years were only a Pyrrhic victory, for they told heavily on his resources. Finally, there swooped upon India the armies of Nadir Shah and Ahmad Shah Abdali. At sea the Mughal empire was almost always helpless.

Hindus formed the third anti-Muslim force in the country. They thought of Muslims as intruders and aggressors, plundering and killing and professing a religion so militantly anti-Hindu. They halted the Arabs in Sind. It took Mahmud seventeen invasions and twenty-five years of fighting to make a dent into the north-west against Rajput resistance. While the Muslim sway extended over northern India, Hindus, even when beaten, did not cease to revolt. The victories of Iltimush in the thirteenth and of Ala-ud-din in the fourteenth centuries in Rajputana and south of the Vindhya were undone even while they were at the helm of affairs. One of the most renowned Hindu domains, the Vijayanagar Empire, was broken only in 1565 by a combination of Muslim po-
wars, but even then its remnants remained predominantly Hindu. In the heyday of the Mughal rule, the Marathas rose to power, carving out an independent kingdom in the teeth of the onslaughts of the Mughal army. After the death of Aurangzeb, they burst through the Vindhyanas and, even though severely beaten in 1761 at the hands of Ahmad Shah Abdali, had still the power to defy the English during the succeeding sixty years.

In the last resort, it was not from the Muslims but from the Marathas in 1818 and the Sikhs in 1849 that the English finally seized power in India.

The picture of India on the advent of the British was something like this. There were numerous kingdoms, viceroyalties and principalities all over the land. No sizeable territory was under a single, powerful central authority. Rulers entered into mutual alliances of one kind or another, which changed rapidly. No ruler exercised reliable control over his dominion, nor could he guarantee security from other rulers. Eighteenth century India was thus ravaged by irrepressible bands of freebooters.

There had come into being a tradition that the function of the king was first and foremost to be king, then collect revenue and finally do police work. In a period when roads were negligible and wheeled traffic almost non-existent, central authority touched but the fringe of Indian life. This was important for villages, which, by the force of circumstances, kept clear of the arm of bureaucracy. Dominated by the institutions of family, caste and community, they were economically self-contained, performed good many legal duties, and participated jointly in paying off land revenue. They were well knit socially and economically but insecure politically. New crops like indigo and opium began to be grown but otherwise land produce followed the old pattern, and there was little incentive to extend cultivation. Towns, not many, were rather important as religious and political centres. Indian trade comprised textiles, sugar, coffee, saltpetre and spices as export, and metals, arms, ammunition and woollens as import. Trade between the West and East Coasts was extensively carried in ships which were built in India.

The days of mass conversion were ended and the religious divisions of population into three parts Hindu and one part Muslim, the latter predominantly inhabiting the north-west and north-east
of the country, was well established. Antagonism between the
two communities had been witnessed. Spurts of nationalism were
also there but only on a regional basis such as in Maharashra
and the Punjab; in any case there was little national sentiment
anywhere to expel foreigners. Once again the north-west of India
was breached by invaders. Tradition-bound Indian rulers saw dan-
gers only from this direction, and little heeded the dangers from
the sea, so that not many of them visualized the eventual triumph
of the English.

2. UNDER THE BRITISH

Conquest

June 23, 1757 is the date of the foundation of the British em-
pire in the East, for on that day Clive won, against a native ruler
of Bengal, the famous battle of Plassey, 70 miles north of Cal-
cutta. Half a century had by then elapsed since the death of
Aurangzeb and the beginning of the disintegration of the Mughal
empire, but two and a half centuries had elapsed since Vasco da
Gama first set foot on the Indian soil, in 1498. For a hundred
years, during 1500-1600, the Portuguese dominated the Indian
Ocean. Between 1600 and the Battle of Plassey altogether 13
European companies were formed to trade with the East and only
one survived, the English East India Company, and this one
founded an empire.

Much groundwork had been done before the Battle of Plassey.
Apart from the establishment of trade centres along the East and
West Coasts and agencies inland, Madras was acquired in 1639,
Bombay in 1665 and Calcutta in 1700. Sensing a favourable situ-
ation, the English then made their first attempt to build up power
as distinct from trade, and the cue was taken from the French.
Under Dupleix, the French were shrewdly penetrating into the
political vacuum created in the south by the downfall of the Mu-
ghals. There were Hindu as well as Muslim kings all fighting
among themselves and all needing help. Help was available from
both the French and the English who thus became rivals for po-
wer. When war broke out between them in 1743 in India rivalry
turned into hostility in which the English had the better of the
French.
THE IMPACT OF ISLAM AND THE WEST

With a few breaks, Clive stayed in India for ten years after Plassey, with Bengal as his main base of operations. From the nominal Mughal emperor of Delhi he secured the right to collect revenue from lower Bengal, Bihar and Orissa, which thus came under British influence though not under British occupation.

Three decades after Lord Clive came Lord Wellesley (1798-1805), and he was the first to re-draw the map of India. By the end of the century the British power was confined, in the north, to the area from lower Bengal to Varanasi, and in the south, to Madras and Bombay, although the British influence extended beyond these limits. Beyond Varanasi was Oudh, of wavering allegiance, Delhi, the seat of the Mughal Emperor, and the northern territories of the Marathas. In South India, the principal powers were the Nizam of Hyderabad, the Sultan of Mysore, and the Maratha confederacy.

Wellesley dealt with them one by one. The Nizam was turned into an ally. The Sultan was defeated and slain, and his dominion broken up. A new state of Mysore was born, under a Hindu raja, while a British-administered province under the name of Madras Presidency was constituted. Of the five Maratha confederates all were beaten except one. However, Central and Western India were still split up into small principalities and kingdoms and violently overrun by bands of freebooters.

The next step in re-drawing the map was taken by the second Lord Hastings (1814-23). Nepal surrendered parts of its territory, agreeing to a frontier which has come down to the present times. The last war with the Marathas was fought in 1818. This, and the successful campaigns against the Pindaris of Central India—the debris of ruined Afghans, Marathas and Jats—led to the formation of the Bombay Presidency and the constitution of a part of Central India into an administrative unit. Meanwhile, the states of Rajputana became subservient to British power.

Thus were the British placed in a position to turn their eyes to the outlying regions, to the dominion of the Sikhs in the Punjab, to Afghanistan beyond the Punjab, to Sind, and, east of Bengal, to Burma. Sind was conquered in 1843, while the Sikhs met their first defeat in 1845. As a result of the First Burmese War, 1824-26, the British captured the provinces of Arakan and Tenasserim.

Finally there came Lord Dalhousie (1848-56) to complete the
fabric of the British rule. The main new acquisition was the Punjab in 1849 when the Sikhs were defeated, but even larger territories were obtained out of the already conquered areas by peaceful methods employing what has come to be known as the "doctrine of lapse". Territories under native rulers who died without heirs lapsed to the British.

Dalhousie's policy of annexation, which caused wide-spread resentment, is considered one of the causes of the Mutiny which occurred in the wake of his retirement from India. Actually, however, a dozen revolts or insurrections in various parts of the country had already taken place. There had grown a contempt for foreigners, a fear of being swamped by an alien culture, and a jealousy against the new generation of men of power and wealth; there was even an outburst of nationalism, the first major native revolt against the British. A fuse to the explosive dump thus formed was supplied by the mutinying soldiers, who thought their cartridges had been greased profanely by the fat of pigs.

On May 10, 1857 a few regiments in Meerut broke through their barracks, slaughtered Europeans and galloped to Delhi, where they proclaimed Bahadur Shah II, the last of the Mughals, as the "Emperor of Hindustan". News of this spread like wild fire and soon a greater part of the area from lower Bengal to Rajputana was enveloped in the conflagration. South of the River Narmada the region remained more or less calm, while the Sikhs of the Punjab, the Gurkhas of Nepal, and a number of Maratha rulers offered assistance.

The main interest lay, however, in the fierce struggle in the cities of Delhi, Kanpur and Lucknow, which first fell to the rebels and were then recaptured by the British. Of the ring leaders the Rani of Jhansi died fighting, Nana Sahib, who proclaimed himself the Peshwa, was chased out into the jungles of Nepal where he died, and Tantia Topi, a military general, was captured and hanged.

Not till two years after the outbreak was the situation fully brought under control, but its hang-over lasted for generations. Something of the memories of the Mutiny was there in the decision of the British finally to quit in 1947, having tasted what Indians were capable of once they got out of hand.
Consolidation

The remaining 90 years of the British rule in India after the Mutiny were marked by the consolidation of Indian frontiers, internal integration, constitutional reorganization, and development.

The British were aware that Afghanistan had been an epicentre of invasions. They had not been particularly worried about it in the second half of the eighteenth century, for Ahmad Shah Abdali died in 1773 after which his empire, which included Kashmir and Sind, broke up, never to be retrieved under his weak successors. During the first four decades of the nineteenth century, an enfeebled, battered Afghanistan was sandwiched between Russia advancing from the north, Britain advancing from the east, as also between Persia and the Sikh Punjab. The British moved faster than the rest, raided Afghanistan in 1839 (First Afghan War), and, annexing Sind in 1843 and Punjab in 1849, moved right upto the Afghan hills. European politics was at this time inextricably mixed up with Indian politics, largely due to the advancement of Russia in Central Asia. The Second Afghan War of 1879 enabled Britain to acquire more frontier territory and establish further influence at Kabul. This was an obvious signal for an Anglo-Russian war, which however was averted; instead the Russo-Afghan borders were demarcated in 1886 and then in 1895.

This ended Britain’s active rivalry with Russia. The next task was of stabilizing the Indo-Afghan frontier. A demarcation of this frontier was effected by drawing the Durand Line, which cut through a mountain belt inhabited by wild, hill tribes, “Pakhtoons”. A good deal of the subsequent British frontier politics was concerned with the task of bringing these tribesmen under control. A number of outposts already occupied, such as Gilgit, were strengthened. The North-Western Frontier Province was carved out in 1901. Railways were built upto the mouths of the strategic passes like Khyber and roads were constructed upto and into the tribal belt. A system of penetrating into the belt by peaceful methods was evolved. But unrest at the frontier never disappeared, and the British Indian territories, otherwise so highly invulnerable from the greatest of powers, were subjected to violent raids right down to the Second World War.
The Indo-Tibetan frontier was less turbulent, and, because of the weakness of Tibet, of lesser concern; nevertheless, it carried the scars of Anglo-Russian rivalry. Bhutan and Sikkim became British protectorates. A British expedition was sent into Tibet in 1904. A convention was established between Russia and Britain to conduct relations with Tibet through China with the implications of Chinese suzerainty over Tibet; Tibet threw off this suzerainty at the end of the First World War. There was an agreement over the north-eastern frontier between Tibet, Britain and China, but neither this nor the frontier with Kashmir-Ladakh was demarcated.

Internal integration of the country was as important as security of the frontiers, and in this respect Princely States were a major problem. At the end of the Mutiny there were nearly 600 States, 500 of them petty with whom treaties of variegated patterns had been arrived at. The British dealt with them cautiously, bringing them under control without formal annexation. At the time of becoming the Empress of India, Queen Victoria proclaimed imperial supremacy. Right down till Independence the States retained their identity and privileges but were quite agreeable to “subordinate co-operation”.

Altogether six parliamentary enactments, passed between 1600 and 1853, governed the functioning of the East India Company, and the effect of each one of them was the gradual transfer of authority from the Company to the Crown. In 1858 the Company ceased to exist, and the British Parliament assumed full control of the government of India. Inaugurated in 1861, the new governing apparatus had two most important components, the Secretary of State in Britain and the Governor General, later called the Viceroy, in India.

Various modifications were made in this apparatus during the next three quarters of a century, particularly in respect of the Governor General, his powers, and the composition and duties of his executive and legislative councils. Indians were increasingly associated with governance and administration, both at the centre and in the provinces; there were elections and there were Indian Ministers; and after 1919 even a system of provincial diarchy was introduced, under which a limited authority was given to these Ministers. When the Second World War broke out, there were
legislatures functioning in all the Indian provinces, composed pre-
dominantly of elected members.

But so long as the British remained in India, the authority of
the Viceroy over Indian administration and of the Secretary of
State over the Indian Government as a whole was unquestion-
able. Defence, foreign relations, high finance and relations with
the Princes never went out of their hands and were dealt with
in their absolute discretion. All the great sinews of power were
thus centralized in British hands.

Of the many factors which contributed to the British conquest
of India, Britain’s technical superiority was one, evidenced not
only during the two and a half centuries (1600-1850) of the con-
quering period but, at least in certain respects, for almost as many
centuries earlier. Thanks to the discovery of gunpowder by Roger
Bacon (1214-1292) firearms began to be produced in Europe
from the beginning of the fourteenth century. Thus Europeans
who invaded India possessed small arms, guns and ammunition
of various types. Britain was probably the first to instal cannons
onto the ships. Around all these weapons tactics were developed.
Indian rulers came to possess firearms later.

Vast strides in firearms were made in Europe throughout the
eighteenth century. To these were added the fruits of Industrial
Revolution, including the steam engine which gave rise to the
steamship and the locomotive. The former improved Britain’s
capacity to dominate the sea, while the latter led to the building
of railways and a system of fast communications in India. Bri-
tain’s Industrial Revolution was in itself partly the result of the
unleashing of the immense Indian wealth.

Industrial Revolution, wealth, stability at home, and naval
supremacy gave Britain marked superiority over its European
rivals. The situation beyond India’s land borders also proved
favourable. Towards the end of the eighteenth century, Afghan-
istan and trans-Oxus region, the cockpits of the storms blowing
over India, fell on evil days. Russia was as yet not in a position to
influence Indian affairs. The Sikhs and Afghans measured swords
among themselves and the Marathas romped all over, col-
liding against each and everybody that came across their
path, thus providing the British a chance to build up
their position in the northern half of India. No worthwhile
combination of Indian powers was developed to meet the foreign challenge.

Coming from a great distance, across continents and oceans, the British were able to function, spatially, in a large perspective. Much more than any ruler in the past, they were aware of the forces operating in Europe, Asia and the Far East, and, with the resources at their disposal, were able to take measures of security, whenever necessary.

Under adequate security cover they were able to evolve a satisfactory system of administration manned by a civil service of the highest order. With the help of the service thus formed, a well organized revenue system was evolved, an educational system was formulated, and the Penal Code as well as the codes of Civil and Criminal Procedures were built, unmatched for their thoroughness and scientific character. There were British administrators who were good, bad or indifferent, but by and large they were good, and, what is more, thanks to the parliamentary spirit pervading at home were able to bring to the Indian problems the weight of collective ability and intelligence. Disciplined as they were, they could be recalled if they did not fit, and never thought of going into revolt, as did the provincial satraps in Mughal times.

3. INDIA ON THE EVE OF INDEPENDENCE

On the termination of the British rule in 1947, India was really three Indias—areas administered by the British, the Princely States, and the Portuguese and French possessions on the West and East coasts respectively. British authority over the whole of the sub-continent was, however, paramount and unchallenged; this had never happened before in history. British India was no doubt divided into provinces, the outcome rather of historical accidents than of cultural or geographical considerations, and these were further subdivided into smaller units. But the central authority was all pervading and powerful, which, through various means, penetrated down to the villages. Village autonomy, which existed when the British came, did not exist when the British left.

Before the outbreak of the Second World War, legislatures were functioning in the provinces as well as at the centre, with restricted powers but containing a majority of elected members.
These bodies enshrined the spirit of western democracy but were not fully democratic; they were parliamentary in form but with substantial deviation from the original model. But while the concept of this form of democracy was fostered for nearly half a century, it had not yet been imbibed by the people. Only two political parties existed worth the name, the Indian National Congress and the Muslim League, and both competed to capture territory and power rather than run government. Politicians had not yet developed sufficient experience for governing a vast territory.

What was lacking in experience was sought to be made up by emotion, by the heat of nationalism. Sparks of Indian nationalism were visible even before the founding of the Indian National Congress in 1885, which turned into fires and conflagrations as communications spread, a common all-India language, English, came into being and an all-India government was established. The very presence of the British fostered nationalism because the British were themselves a model of patriotism. English education promoted ideas of freedom and gave a fillip to the movement for home rule. Nationalism permeated into the political sphere and also touched industry and commerce, the civil services and the armed forces. But it was predominantly preoccupied with the demand for the British to quit, on the premises that most good things of life would come automatically after they quit.

It is estimated that the area under cultivation increased during the British times, a fact to which irrigation schemes contributed substantially. More and more of this area began to be diverted to commercial crops, including cotton, indigo, opium and jute. A tendency also developed to substitute inferior for superior grain, such as bajra for wheat. Commercialization of agriculture was at least partly the result of the demand for land revenue in cash. This the peasantry found increasingly difficult to meet, hence there was large-scale rural indebtedness. As property law developed, based upon British jurisprudence, land could be divided and sold; thus there was fragmentation as well as dispossession of land, the latter giving rise to absentee landlords. The British touched numerous facets and raised a host of problems of rural life, human and material, but left solutions to their successors.

Partly as a result of the Industrial Revolution and partly of deliberate policy, Indian cotton and jute handloom industries, which
had flourished for centuries, were practically destroyed. In Britain and elsewhere, technical developments were fast and numerous; almost each one of them had its impact on India, causing problems of employment, trade, currency, exchange, banking and managing systems; often the impact was adverse. New industries cropped up, including textile and jute manufactures, mining of coal and manganese, iron and steel manufacture, and production of sugar and cement. They were mostly controlled by British capital and in every case machinery had to be imported. The British taught Indians to assemble and work a few machines but not how to make them. In addition to religious and political centres, as in the past, there also grew up industrial centres, with their problems of active industrial labour; the labour rapidly began to be inspired by revolutionary impulses. The trade increased, particularly after the opening of the Suez Canal in 1869, but thanks to the emergence of the ironclad ship and application of discriminatory navigation laws, the Indian ship-building industry was destroyed.

British attitude to religion may be viewed in regard to Christianity and in regard to religions in India, particularly Hinduism and Islam.

Christianity came to India—South India, to be precise—much before the British, in A.D. 52 in fact, with the traditional landing of St. Thomas on the West Coast. Historical records of the Syrian Church in India are available from the fourth century. With the arrival of the Portuguese in 1548, it came into collision with the Roman Church. Roman Catholicism flourished in India under the aegis of the Portuguese, with its base in Goa. Protestantism came in the early eighteenth century. The East India Company was not happy over missionary activity and considered it detrimental to trade, but from 1813 Christian missions were granted political and legal support.

Nationalist suspicions about Christianity never abated, particularly in regard to conversion of Harijans or untouchables and tribal population. But there were three aspects of Christian religion which were in marked contrast to Islam. It initiated powerful indigenous movements like the Brahma Samaj; it went beyond merely preaching the gospel and took up humanitarian work; and it sought to shed off foreign influence. Once again, like Islam, it proved that political power was necessary to promote religion, but
it also proved that, unlike Islam, religion need not become a political force.

In the beginning, the British attitude to Indian religions was in striking contrast to the attitude of Muslim rulers. Religious practices were respected, and were even given official countenance. The government undertook liabilities in regard to a number of religious endowments. In dispensing justice in accordance with the meticulously framed legal code, religion was in certain cases given an overriding force. With enormous labour and zest, exploration of the Indian culture was initiated; a number of sacred books were thus translated into English as well as into vernacular literature and were for the first time made available to the general public.

This policy of non-interference and respect for religious affairs had its impact, but not wholly in the way anticipated. Discovery of the past prompted a number of Indian reformers to scrap off the obnoxious encrustations of religion and also infuse it with something of the new spirit, partly Christian, partly scientific. It also gave a fillip to nationalism as well as to the movement dedicated to the revival of the religious past dating back to the Vedic times. The mere fact that there were foreigners around with supreme authority to introduce new-fangled ideas hardened the walls of casteism. After the Mutiny, the British discovered how religion could be used to serve political ends. Casteism was given a premium in dividing the population, in doling out jobs, in building up the armed forces, and in devising the system of governance. From the last quarter of the nineteenth century, Hindus and Muslims began to be viewed as two separate communities, which through various measures, acquired the look of two separate nations. During the first four decades of the twentieth century, enough spade-work was done to partition the country on the two-nation basis.

For the first time in Indian history the British hit upon an appropriate defence system for India. Such a system had to be comprehensive, by land, by sea and by air. Generally speaking, and in the circumstances of the time, land and naval defence was adequate and was well organized both with military power and diplomacy. The British guarded the entire land frontier and cushioned it with buffers. They also put India in the geopolitical context of
Central Asia, Middle East, the Indian Ocean and South-East Asia and provided it a vast defensive coverage. As a result, India was insulated from danger in the First World War and suffered only peripheral attacks in the Second.

But in the British scheme of things India figured only as an imperial base and not as a self-sustained territorial entity, so that the heart of Indian defence was in Britain and not in India. The Indian component of the British Indian army was never large, was trained mostly for subordinate roles and was commanded at every key post by British personnel. It was equipped mostly with foreign weapons, and badly equipped at that. The partition of the country destroyed its cohesive character and made it imbalanced; and when the British support pulled out, it was unfit to operate even on land frontiers, leave alone beyond them or across the seas.
CHAPTER 3

THE PHYSICAL LANDSCAPE AND ITS SIGNIFICANCE

INDIAN civilization, as described in the preceding chapters, has risen and flourished in a characteristic physical environment, which has influenced it and by which in turn it has been influenced profoundly. This mutual influence continues, and one way to learn about the disposition and aspirations of the Indians would be to observe the process.

Physical environment is a live, dynamic part of human society; it responds to external as well as internal forces. Post-war geopolitical changes, especially in India's trans-border regions, have given a new meaning to India's geography as a whole as well as in parts. Technology has come down upon it, with its engines of destruction which have rendered vulnerable places once considered safe, and engines of construction which have rendered significant places once considered meaningless. Regions once ignored and left in isolation have thrown up peoples who either demand attention or resist attention. New social and economic forces are altering the pattern of relationship of one region with the other.

All this influences the people as well as throws a challenge to them. Four main areas of this challenge are proposed to be examined in this and the next chapter. India's land surface with its frontiers and geographical divisions and features which undergo
constant transformation will be the concern of the present chapter, while the succeeding chapter will deal with location and climate, invasion routes, and the question of territory.

India's latitudes and longitudes are 8° 4’ and 37° 6’ north and 68° 7’ and 97° 25’ east. It comprises 17 States,¹ II Union Territories, Andaman and Nicobar Islands in the Bay of Bengal, and Laccadive, Minicoy and Amindeivi Islands in the Arabian Sea. It is usually divided into five geographical areas: Northern Mountain Range, Northern Plain, Central Highlands, Plateaus of the Peninsula, and West and East Coastlands of the Peninsula. This division has been maintained here. While conforming to historical development, the many physical features are also receiving today the imprint of technological, regional and intra-regional forces. One addition to this traditional division should be made, namely, India’s oversea territory which has become significant as a part of India’s security system.

1. NORTHERN MOUNTAIN SYSTEM

We shall first have a quick look at the Himalaya² from west to east. This mountain range is the most prominent feature of the region. It extends from the Pamir knot on the outskirts of Central Asia to Namcha Barwa near Burma, from where, taking a sharp southward turn, it runs down to the Bay of Bengal. It is about 2,500 miles long and for most of its length 100 to 250 miles broad. In this range lie, on the Indian side, Jammu and Kashmir, Himachal Pradesh, Sikkim, Bhutan, Assam, Manipur, and Nagaland; and, outside India, small parts of West Pakistan, Sinkiang, Burma and a considerable part of Tibet.

High elevation is the most outstanding and almost ubiquitous feature of the range. Of the 16 mountain peaks of the world which are above 25,000 feet, 13 are in this mountain range, and

¹ Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Nagaland, Orissa, Punjab, Rajasthan, Uttar Pradesh, West Bengal.

² In some geographical texts, the term “Himalayas” is restricted to the range extending from Nanga Parbat (Kashmir) to Namcha Barwa. In these pages however the nomenclature of The Gazetteer of India is adopted, except that the mountain is mentioned in singular, not plural. The Nanga Parbat-Namcha Barwa sector is called the Great Himalaya.
of these 13, 7 are either within India or overlook India. These are (in feet): Mt. Everest (29,028), Mt. Godwin Austen (28,250), Kanchenjunga (28,146), Nanga Parbat (26,660), Gasherbrum (26,483), Nanda Devi (26,645), Rakaposhi (25,550) and Mt. Kamet (25,447). The Indo-Burmese sector is low, having an average height of only 7,100 feet; the Saramati Peak is the highest point, 12,700 feet.

The western sector, lying between the Pamir knot and Nepal, may be divided into three parts, the Kashmir Himalaya, Himachal Pradesh and Kumaon Himalaya.

Covering 130,000 square miles of mountain area and being 450 miles from west to east and 300 miles from north to south, the Kashmir Himalaya is the largest part of the Himalayan range, comprising three main mountain systems. The southernmost is the Pir Panjal, which divides the Jammu and Punjab plains from the Kashmir valley and is traversed by two well-known passes, the Pir Panjal and the Banihal. Through the latter passes the present road into the valley. The valley is bounded by a branch of the Great Himalaya to the north. Beyond it is the River Indus, and north of the Indus is the Karakoram mountain, a region of lofty peaks and mighty glaciers as well as steppe lands and semi-desert landscape, reminding us that we are on the outskirts of Central Asia. The Zanskar Range and the Ladakh Range which lie parallel to the Karakoram mountain for part of their lengths are the other two ranges and run beyond the Indian frontiers into Tibet.

The second part of this sector forms Himachal Pradesh, covering an area of 28,000 square miles. Four of the six rivers, so important for the economic well-being of the Punjab, rise here; these are the Sutlej, Beas, Ravi and Chenab. The remaining two, the Jhelum and the Indus, rise in the Kashmir Himalaya. Its mineral wealth is considerable but not yet tapped, although oil has been found. The Kangra and Kulu valleys are important bases for ascent to the mountains which lie athwart Tibet.

The third sector covering 15,000 square miles is formed by the Kumaon Himalaya, where lie the sources of the Rivers Ganga and Yamuna and through which pilgrims have trekked to the sacred Mt. Kailash and Manasarover Lake for countless centuries. It is the most frequented part of the mountain, sought after
by the religious-minded in search of sanctuaries, by mountaineers in search of peaks and glaciers, and by tourists in search of hill stations.

Geography has affected this Western Himalayan sector greatly. Its population is only 29 per square mile as against an average of 450 per square mile for India as a whole. The Kashmir Himalaya is predominantly Muslim because of its proximity to Islam in the Middle East; Ladakh Himalaya is Buddhist, being a continuation of the Buddhist belt of Tibet; and the Kumaon Himalaya is Hindu. The latter two areas adjoin Tibet, an isolated country; the former, on the other hand, has been susceptible to pressures from Afghanistan, Sinkiang and West China and has consequently figured prominently in history. Aside from Kumaon Himalaya, the rest of the region has been the centre of caravan routes in the past, where diverse peoples from India, Africa, Europe, Middle East, Russia and China have met. Since the end of the Second World War traffic through it has been restricted, but the area has become a theatre of international conflict.

Jammu and Kashmir

The State of Jammu and Kashmir is typical of the region. It has an area of 86,000 square miles and a population, in 1968, of nearly 4,700,000. Jammu is akin to the Punjab plains, lying in a foothill terrain 5-15 miles wide. From Jammu town, after a sharp descent, the land begins to rise till it reaches the Pir Panjal range, a southern offshoot of the Himalaya. Through the Pir Panjal Pass (11,400 feet) once passed the Mughal road, but now it has been substituted by Banihal Pass (9,300 feet), through which the present road passes. Down the range is the Kashmir valley, the valley which kings have coveted, poets have praised and saints have visited. When Kalhana, the noted Kashmir historian wrote his Rajatarangani he was concerned with this part of the country, ignoring the tangled, rocky masses and the seemingly futile expanses of the north; and when in the past kings built their defences or erected their security gates, it was to defend this valley. It was while entering the Kashmir valley that Mahmud Ghazni in A.D. 1021 and Ranjit Singh in A.D. 1814 were beaten at Loharo on the Pir Panjal, one of the most heavily defended outposts in ancient Kashmir.
Situated at an altitude of 5,500 feet the Kashmir valley is 82 x 25 square miles, in which Srinagar, the capital and largest town, is situated with its 300,000 inhabitants. The River Jhelum flows through it. Literally, Srinagar means “city of wealth”, which no doubt it is, but the wealth is mostly in its beauty. Once upon a time, the valley also had its wealth in learning in addition to beauty and there is a mantra which every Hindu recited: Namaste Sarade Kashmirpurvasini, “salute to the goddess of learning who resides in Kashmir.” Bauxite, coal, gypsum, ochres, chromite and iron are among the minerals found in the State; among the precious stones are rubies, beryls, quartz and serpentine; uranium is a possibility.

Up north of the valley the landscape and skyscape change fast. The parting comes from Burzil Pass while climbing up towards Gilgit, and Zoji La, while heading for Ladakh. The paddy, mulberry, willows and apples of the valley give way to millet, maize, walnut and barley, and then to birch tree and grass and glaciers. On crossing the crest, there comes another complex of mountains, Ladakh Range, Zanskar, Kun Lun, and the Pamirs. The Indus flows through gorges, sometimes 15,000 feet deep and 15 miles wide, in its 1800-mile long journey from the Kailash Range to the Arabian Sea, in the course of which it takes a spectacular turn around Nanga Parbat.

With biting winds; dry, bitter cold; temperatures varying from 15° to 65° F and drizzly, annual rainfall of no more than 4 inches; grass plains and streams choked with boulders; arid, 'mournful' deserts embedded in ice; occasionally a spray of wild flowers in fields cultivated by the curious dzo, a cross between yak bull and cow: here is a region which needs some imagination to contemplate from Delhi, for we are not in the plains but on the fringe of Central Asia.

Kashmir is a marchland between Russia, China, Tibet, Pakistan, Afghanistan and India, a fact borne out by its communication lines, attractions of international character, and military history.

During British days the Rawalpindi-Srinagar route was popular, passing through Domel, Uri and Baramula. A part of this route was also used by Hiuen Tsang who entered dvara, the gate, at Baramula in A.D. 631; it was also used by Pakistani tribesmen and guerrillas in 1948 and 1965, who infiltrated into the valley. The
utility of this route is partly neutralized by the wild character of its hinterland and terrain.

But in the Mughal days this route was not so popular. After the Mughal conquest of Kashmir in 1589 a route over the Pir Panjal was developed, but the pass through which it coursed was bound with snow, as it is now, for half the year. A detour to the west of it however takes visitors to Poonch from where Srinagar is accessible through Baramula or Tosh maidan most of the year round. It was this route which the Indian Army adopted in 1948. The Pir Panjal route has since been greatly strengthened by a motorable road from Pathankot to Jammu—a railway between these two towns is being built—and the construction of Banihal tunnel, way east of the old pass. With the advent of air communications, a matter of 2 hours from Delhi to Srinagar or Rawalpindi to Gilgit, a good deal of the terror of old modes of travel has ceased to exist.

There are also the old Central Asian routes, via Gilgit or via Leh, to Yarkand-Kashgar. From Srinagar to Gilgit is a pony track which, under the Dogra rule, was kept in a reasonable state of repair; traversed ordinarily in fourteen halts, and faster by couriers, it trailed through the Gurez valley, Burzil Pass (13,000 feet) and Bunji. From Gilgit to Yarkand-Kashgar the route lies through either Kilik Pass or Mintaka Pass, over a distance of about 450 miles. This is the Pamir route. Closed after the partition, it has now been partly opened through Pak-Chinese collaboration. The other route is from Srinagar through Zoji La to Leh. From Leh there are two routes, both through Karakoram Pass, leading to Yarkand and Kashgar, a distance of about 580 miles. The Srinagar-Zoji La-Leh route has become a supply line of Indian forces in Ladakh.

Despite its wilderness the region has evoked human response of great variety. The Jesuit fathers came here drawn by the mysteries of Tibet. William Moorcraft, a traveller, thought there was gold in the sands of the Shyok River and believed there was "the hope of creating a demand for British manufacturer in the heart of Asia." Botanists have come for specimens of plants, explorers to find the source of the Indus, and adventurers to conquer mountain peaks; and there was at least one man by the name of G. T. Vigne, who tried to find analogies between Kashmir his-
tory and geneologies of the Old Testament. More recently, archaeologists have been searching for links in the chain of human development and geographers have made it a laboratory to test the influence of environment on human life.

Accessible from many lands, Kashmir has been the hunting ground of competing powers. It was under Ashoka, an Indian, Kanishka, a Central Asian, Mihirakula, a ruler of Afghanistan, and Lalitdatiya, an Indian. Mahmud Ghazni and Tamerlane knocked at its gates, while their Afghan or Turkestaní successors captured it, from whom it was wrested by Indian kings again.

The British understood what had happened and sought to give Kashmir a political expression as well as military strength. First they passed it on to Gulab Singh, the Dogra ruler; the Dogras carried their conquests to Ladakh and Baltistan and drew India’s present contours. Then Gilgit was established as a strategic post and later Wakhan, a 20-mile Afghan territory, was interposed between Russian and Indian frontiers. These were measures of far-reaching importance, providing Indian rulers a bulwark against Russian expansionism, a base to deal with the turbulences of the north-west frontier, and security of a vital frontier in order to consolidate internal administration.

Today in Kashmir history does not repeat itself, it continues. Political pressures of diverse kinds work on it, as they have been working for ages. Having got possession of it on partition, India was faced with the problem of sustaining the possession. This required military power in addition to legal right, and military power to the requisite dimensions India did not command. One-third of Jammu and Kashmir was seized by Pakistan and one-third of Ladakh was seized by China. Jammu and Kashmir thus became a gigantic trijunction where the interests of three great powers—Russia, China and India—meet; Pakistan got thrown in as a subsidiary, making maximum profit with minimum credibility to sustain its own position.

Within this broad framework, the geopolitical contours of the State have begun to change rapidly. Lines of communication have multiplied. Many roads, some leading to the northernmost Karakoram, can take small tanks and heavy trucks. Passes, which had become dormant after the cessation of caravan movements, have come to life again, with territories adjacent to them, such as Gil-
git in regard to Mintaka Pass and Aksai Chin in regard to Karakoram Pass, having acquired strategic importance. Air power has begun to make its contribution to the new logistics, not only within the State but also as a link between the State and Sinkiang-Tibet regions. Airfields, military training grounds, dumps for arms and equipment, and barracks for the permanently stationed soldiers are the latest additions to the snows, winds, frozen lakes and bizarre plateaus of this one of the most difficult and romantic areas of the world. Technology has no doubt eroded its geography, but despite erosion, it still possesses enormous value for purposes of India's defence; you take away Jammu and Kashmir and you bring Central Asia down to the Indian plains.

The Eastern Sector

The eastern sector of the Himalaya may be considered in two parts, one comprising Sikkim, Bhutan and the North-Eastern Frontier Agency of Assam, and the other the rest of Assam, Nagaland and adjoining hill territory; the total area is about 48,000 square miles. The physical features of this region are in marked contrast to those of the Western Himalaya. Here the impact of the monsoon is direct and intense, which gives rise to wet tropical jungle, so different from the dry wastelands of the Ladakh and Karakoram zone. The rise of the mountains is abrupt and there are few Siwalik features as in Kumaon or Jammu.

Sikkim, an Indian protectorate, is a small state of 2,800 square miles and Bhutan, an autonomous state under the Indian Union, is 8,800 square miles. The North-Eastern Frontier Agency, lying east-west between Bhutan and Mishmi Hills, and south-north between the Brahmaputra valley and the Tibetan border, covers about 34,000 square miles of mountain area. Overlooking it is the Great Himalaya, with many of its peaks rising to 20,000 ft. The R. Tsangpo enters it as R. Dihand after a sharp bend in Tibet, and then is named R. Brahmaputra. The Mishmi Hills at the north-eastern extremity contain the loftiest ranges rising above 16,000 ft. Lower down is the Patkal range, with a pass through which traffic between Burma and Assam has gone on for centuries. Over this range was constructed a metalled road during the Second World War, connecting the Assam valley with Burma's
Hukawng valley. Forested, remote, sparsely inhabited by tribes who trace their ancestry to ancient migrations of the Mongoloid peoples into Burma and Indo-China, NEFA has been off the beat of modern civilization.

The second part of the eastern sector comprises Nagaland, Manipur Hills, North Cachar Hills, Mizo Hills and Tripura Hills.
PHYSICAL LANDSCAPE & ITS SIGNIFICANCE

It contains also the Assam valley and the Meghalaya plateau in which is situated Shillong, the capital of Assam.

To the east of Nagaland (6,250 square miles) lie the Naga hills, which form the watershed between India and Burma; Sarapat, the highest peak of the East Himalayan range, lies in these hills. To the west are the hills of Kohima, which is also the name of the capital. Deep valleys, fast-flowing rivers, dense forests, all cut here and there by lofty hills are a characteristic of the Naga landscape. Some of these have provided hide-outs to a section of Naga rebels. The territory of Manipur lies between the India-Burma frontier and the Cachar plains and hills, once a large basin perhaps, scooped between mountains. Manipur is 8,800 square miles in area; Imphal, the capital, was the target of a Japanese attack in the Second World War. The Mizo hill district is almost equal in area to Manipur, but has long north-south ranges interspersed with valleys. It has frontiers with Burma as well as East Pakistan, which have often been used by Mizo rebels for escape. The main road runs from Silchar to Aijal, which becomes a part of the total quagmire under what is known as the "hose-pipe monsoon" that strikes this area with enormous violence. Tripura (4,000 square miles) is actually an appendix of the Mizo hill district, again with a range-and-valley type of topography.

North-East India figured prominently in 1962 when the Chinese troops overran a part of it. That highlighted not only its military but economic and geopolitical importance. Its wealth, largely untapped, is enormous, comprising oil, hydro-electric power, forest produce and minerals; in this respect Tibet's easternmost sector should be considered a continuation of India's North-East, for this too has an enormous economic potential. Despite the fact that the Himalayan passes were breached by the Chinese forces, the mountain terrain, forests and heavy rains which fall part of the year still form, together, a difficult theatre for military operations. The River Brahmaputra is a vital parting line between this theatre and the valley. In a wider geopolitical context, the North-East is a high-level ground for scanning the Indian Ocean, the Burma-Indo-China complex, East China, and North India.
This lies between the Lower Himalaya and the forelands of the southern peninsular hills and between the mountains of Assam-Burma and Iran-Afghanistan to the east and west, and is split between India and Pakistan. The Indian share lies between the River Sutlej and the eastern-most bend of the River Ganga, and is distributed among West Bengal, Bihar, U.P., the Punjab, Haryana and Rajasthan; an area altogether a quarter of a million square miles.

A thousand miles separate Calcutta from Amritsar, two capital cities of the plain farthest apart, and yet the topographical uniformity of the land is remarkable. Most of it is below 500 feet, eastward the rise is even less than a 100 feet while only in the west of the Punjab the level rises to 1,200 feet. There are no natural obstacles in the way.

There are, however, differences of climate, soil and human response from place to place. The eastern half is humid, fertile, heavily cultivated and densely populated, while in the Rajasthan desert conditions prevail. Climate, combined with the location of the Punjab on the routes of invasion, has made Punjabis a hardy, self-reliant people. Minerals are scarce, which accounts for a comparative paucity of heavy industry. Three rivers of international repute flow through it, the Indus, the Ganga and the Brahmaputra, valuable for irrigation, hydro-electric power and transport. Once a historic boundary, the Indus now flows through both India and Pakistan, cutting across their strategic interests, while the Brahmaputra is important for the defence of North-East India. All these three rivers are not ideal for navigation because of sifting banks and variations in the volumes of water, and steam navigation is severely limited. Road and rail construction are prominent enterprises throughout the plain.

History emphasizes the strategic character of the plain. For centuries it has been receiving, absorbing and radiating pressure and has been the hunting ground of numerous contenders for power. There have been three big Indian empires, the Mauryan, the Mughal and the British, and all three have been based in the plain. Into this flat, featureless land, foreigners after foreigners have come, from over the Arabian Sea and mountains in the West
and the Bay of Bengal in the east. In this land too lies the small territory which divides the group of Himalayan rivers flowing into the Arabian Sea from another group of Himalayan rivers flowing into the Bay of Bengal; here lies the marchland between Islam and Hindustan in the past and Pakistan and India today.

Once occupied, the plain has always been a base of power, from which rulers have embarked on conquests and the building of empires. Time, situation and the ambition of kings have been the factors determining the directions of influence, control and occupation. Of these empire builders the British did the best. Settled in Bengal, they made a thrust into the west, conquered the Mughals, mopped up the Rohillas, tamed the Rajputs, beat up the Sikhs, and conquered Sind. The unique aspect of the British conquests was that their bases of control lay in the northern plain as well as in the southern peninsula. Having consolidated power in metropolitan India, they also looked up north. They brought Nepal and Tibet under their influence and even stepped into Sinkiang. The British opened a gateway into Central Asia wider than any Indian ruler of the plain had ever done before.

In developing a scheme of power relations, the British showed two things. The north is important but so is the south, and the two must hold together to preserve India as a unit; and from the vantage of the plain the ruler must keep watch in all directions.

In terms of modern warfare, the plain has no cover and no refuge, is highly suitable for the operation of armoured forces, and contains some of the most developed areas of the country sensitive to air attack. It does not have resources enough to function as an isolated unit in the scheme of defence. As in the past, but increasingly so today, it is indispensable for the security of the northern mountains, and, from the Bay of Bengal and the Arabian Sea, where it ends, it participates in the strategy of the Indian Ocean.

3. THE CENTRAL HIGHLANDS

The Central Highlands extend north-south from the border of the plains to the Vindhya Range and east-west from the Aravalli range to the Ka'imur Hills; they include one-third of Rajasthan, one half of Madhya Pradesh and a small portion of Uttar Pradesh.
On the north-west lies one of the world's oldest mountains, the Aravalli range, cutting into the Thar desert, throwing its splinters of stone and rock as far as Delhi 500 miles away, which have become the Delhi ridge. Transverse traffic is easy in the northern part through many wide gaps, but no railway or highway crosses the southern Aravalli, where movement is restricted to passes: four of these passes are important, the Barr, the Pipli Ghat, the Dewair and the Desuri.

Around this range, notably at Chitorgarh, there lay once upon a time the stronghold of the Rajputs, their last refuge against Muslim attacks. Further east is the strategic Malwa plateau once a passageway between the states based upon the Delhi-Agra axis and the Deccan and through which lay the ancient route from Surat on the Arabian Sea to Delhi. The area is drained by the River Chambal, one of the few Indian rivers flowing north, with its ravines and gorges which have sheltered outlaws for ages.

The Vindhy Range sweeps over a distance of 750 miles east to west. Parts of it are heavily forested and scarcely populated. For more than half of its length, the range overlooks the Narmada to its south, one of India's sacred rivers which rises in the Amar-kantak plateau and flows into the Arabian Sea. Presently, the importance of the river is economic, affecting the States of Madhya Pradesh, Maharashtra and Gujarat, for it has a potential of irrigating 10 million acres of land and generating 2 million kW of power.

Immediately to the south of the Narmada is the last prominent feature of the Central Highlands, the Satpura Range, extending from the Rajpipla hills in the west to Maikala plateau in the east. It is higher than the Vindhya Range, the highest peak near Pachmarhi hill station being 4,500 feet.

From four towns, Delhi, Agra, Jhansi and Allahabad lying on the fringe of the Northern Plain, railways enter the Central Highlands. Actually the plains and the Central Highlands merge into each other imperceptibly. The true barrier between the north and the south is formed not by the whole of these Highlands, but only by the three southernmost features, the Vindhya Range, the River Narmada and the Satpura Range. This area is still difficult of passage, divisive and forbidding, and the home of a number of aboriginal tribes, but is being developed. Militarily, it is suitable for
stocking war material and for training in jungle warfare, schools for which have been set up; and it is easily the backbone of a total defence system which takes into account at once the threats from the directions of the north as well as of the south.

4. PLATEAUS OF THE PENINSULA

South of this strategic zone lies peninsular India in which are the territories of eight States, Gujarat, Madhya Pradesh, Orissa, Maharashtra, Andhra Pradesh, Mysore, Madras and Kerala, constituting nearly three-fourths of India.

From the extremity of this peninsular south one hears sometimes about Aryan imperialism and the tyranny of Delhi, and there is no doubt that geography has a hand in it. Madras, Mysore and Kerala are the farthest from the seat of power, and their Tamil, Telugu and Malayalese cultures have distinctive features compared to the dominant strains of the north. Between them the transition zones are visible; for instance, the strip of Goa on the West Coast and Nellore on the East Coast are representative of the Marathi-Malayalese and Telugu-Tamil cultures respectively.

Plateaus form the largest feature of the peninsula, extending for 1,000 miles north to south and 900 miles east to west, consisting of four main sub-divisions: Western Ghats, Deccan Plateau, Eastern Plateau, and Eastern Ghats.

The Western Ghats, also called the Sahyadri hills, overlook the Arabian Sea for about 900 miles from Surat to Kanya Kumari, coming close to the sea-shore in the middle part. The average height is 3,000 feet and the highest point is 9,000 feet in the Nilgiris. The Nilgiris group and the Anaimalai-Palni-Cardamon group in the south are the highest parts of the mountain chain.

The western face of the Ghats receives moderate to excessive rainfall, while the eastern face is in the rainshadow. To the west therefore are forests, canyons and gorges through which streams and rivers run most of the year round, impeding approaches from the sea into the interior. Even though the coastland is narrow and the Ghats are not wide, the transverse intercourse has all along been hampered by difficulties of terrain. Talghat and Bhorghat are two important passes in the northern sector of the Ghats, through which the Konkan plain is connected with the Deccan by road and rail. In the south, the Palghat Gap marks a break
in the range. It is 15 miles wide at its narrowest point, being at an elevation of 500 feet amidst bordering ranges of 5,000 to 7,000 feet. Through this the Kerala plains are connected with the interior.

The Western Ghats have been more than a barrier between the sea and the interior, for these are a great region of security and refuge. Numerous forts were built here in the past; there is one visible from the premises of the present National Defence Academy in Poona, and together the two features symbolise the continuity of a historic landscape. To its hide-outs women and children used to be evacuated in times of danger. Here lay also the testing-ground of the tactics of the Marathas, with which they harassed and partly stemmed the armies of the Mughal emperors. In their fastnesses lay the base of the Maratha empire which once stretched from the West Coast to the East Coast. And there must have been something in them which gripped and held, for so long as the Marathas clung to the Ghats they were safe, but when they moved too far away they broke up.

All the important rivers of the Deccan have their sources in the Western Ghats, flowing into the Bay of Bengal, although rising nearer the Arabian Sea: they are being dammed for irrigation and power.

The impregnable character of the mountain hits the eye even today, but other features are gaining importance. On their slopes in Kerala rubber is grown, which has industrial and military value and is otherwise a scarce material in India, and also tea which is India's permanent earner of foreign exchange. This again is the place for training in jungle warfare and location of military centres, of which there are many from Poona in the north to Wellington in the south. Age has diminished but not eliminated its advantages of invulnerability.

The Deccan Plateau lies between the Western Ghats on the west and the Eastern Ghats and Maikal Range on the east, and the River Tapti and the Nilgiris Hills on the north and south.

Being in the rainshadow of the Western Ghats and thus deprived of the monsoonal moisture from the Arabian Sea, and also bypassed by the monsoons of the Bay of Bengal, it bears many signs of aridity and dry monotony. Shortage of water has led to the ingenious but simple device of the tank, the ancient answer to the
modern reservoir, and there are thousands of tanks dotting the landscape. A cross-country travel from Poona to Madras brings into relief not only a transition of cultures but a change from black soil to red soil and from little streams to full-fledged rivers which go to form some of the world’s most fertile deltas. And there are the forts, once the strongholds of defence but now most of them falling apart.

From its western heights of 2,000 feet the plateau slopes gently to the east and south-east, a feature which determines the direction of flow of the rivers Mahanadi, Godavari, Krishna and Cauveri, the four main rivers of the south. They are all very important economically. It will be noticed, remarkably enough, that while there are a few small rivers flowing from south to north—the Chambal, for instance—there are no rivers in India flowing from north to south. Thus there are no natural means of communication between the two parts of the country, and indeed national history would have been different if there had been some.

The eastern part of the plateau, embracing most of Orissa and Bihar, is India’s metal heart, producing iron, coal, mica, manganese, copper, and uranium. Here lie India’s main steel producing centres as also many factories for heavy industry. The Damodar is one of its famous rivers; in its valley three new reservoirs have been constructed, providing water for power generation, irrigation and navigation. Population is sparse, which is one of the reasons for establishing a colony in the tract known as Dandakaranya for the rehabilitation of displaced persons.

The Eastern Ghats stretch from the Mahanadi to Kanya Kumari, overlooking the East Coast, over a distance of 1,300 miles. Their width varies from 20 miles to 125 miles and the elevation is generally under 1,000 feet. Their mountainous character is pronounced between the Rivers Mahanadi and Godavari and between the Rivers Krishna and Pennar. Elsewhere the Ghats do not constitute a range, and are rather a chain of low hills, separated from each other. The southern section is valuable for sandalwood and timber, and is cut across by the Cauvery which provides water for the Mettur reservoir. Portions of the Ghats are inhospitable, where only a few tribal people live, but on the whole the Eastern Ghats are much less prohibitive than the Western Ghats and lend themselves to easy transverse communications.
The history of the plateau peninsula is inseparable from that of the coastallands, although some of its features have made their individual distinctive contributions. Between the Rivers Krishna and Tungabhadra lies the Doab, once a marchland between the northern Muslim kings and southern Hindu kings. Four Muslim kings in the shadow of the Vindhyan mountains made an alliance in 1565 and after the fateful battle of Talikota involving a million men broke up the Hindu empire of Vijayanagar. On that date the roadblocks to the south were cleared for armies to march up and down, so that for nearly three centuries the country was plunged into desperate confusion.

Another set of forces emerged in the eighteenth century, Muslims in Hyderabad with their backs to the Vindhyas, Marathas in Poona along the Western Ghats, and the Raja of Mysore in the south against the sea. As the century wore on a fourth was added to it, the British. In the three wars between the British and Mysore rulers, terrain featured prominently, particularly the rocky tract between the Rivers Ponnaiyar and Palar. Here lay Baramahal, the ‘twelve palaces’, a passageway between Mysore and the East Coast, which was hotly contested between Tippu Sultan and the British. Its capture in 1792 gave Cornwallis security of the lines of communication from the Madras base into the interior, and simplified his task of storming the Serangapatam fort and eliminating Tippu.

5. WEST AND EAST COASTLANDS

The West Coast runs from Surat to Kanya Kumari, being dominated for most of its length by the Western Ghats. The length is 1,000 miles and width 5 to 15 miles. The littoral is divided up among the three States of Gujarat, Maharashtra and Kerala and is representative of the three linguistic cultures. From the sea to the Ghats and into the interior, only a few crossings are permissible, mostly through the passes. A 750 mile west coast road from Bombay to Kanya Kumari is all but complete.

Separation but not isolation from the interior has been a characteristic of the littoral territory. Gujarat has been way off the main routes of war, separated as it is from the Malwa crossway by jungle country, but through it passed the famous Cambay-Agra road: and from Mahmud Ghazni onward (who sacked the tem-
example of Som Nath in A.D. 1024) the country was interminably mixed up with the politics of the Northern Plain. In the seventeenth century Surat was a special raiding target of the Marathas. And at least once the British army marched right across the peninsula from Madras on the East Coast to capture Mangalore on the West Coast.

More significant, however, than its interior connections has been its seaward look and oversea intercourse with the countries of the Middle East, Africa and Europe and the eastern countries of Asia. On this coast Indians encountered the Greeks, Romans and Chinese for commerce and also the Arabs who came sometimes as traders and sometimes as invaders. Here also they encountered the Portuguese, the Dutch, the French and the British, with whom they mingled as well as crossed swords, while they saw them crossing swords with one another. The coast is littered with ports. Some of them are of no significance today, such as Mandavi and Tuna in Gujarat and Chaul and Vijyadrug in Konkan, unless they are developed. Others are relegated to second-rate towns, like Broach and Surat at the lower crossings of the Rivers Narmada and Tapti, although once they were the main gateways of India. Yet others have sprung into international importance, like Bombay, Kandla, Goa and Cochin.

That there are so many small and big ports on this coast is striking enough, but even more striking is the fact that so many of them were used by Western Powers in the course of their four centuries of struggle for dominance. Here is then a sector of sea resting along the Indian shores, offering high prospects of mobility and contacts and enabling the centres of power and pressure to be shifted over 900 miles with remarkable ease.

Additional importance has been added to the littoral with the passing of years. Gujarat, famous enough already as the birthplace of Gandhi and through him the generator of new convulsions in the country, is a major centre of cotton textiles, which are foreign exchange earners. Here too is located the country’s largest oil-bearing area. The Rann of Kutch, the scene of Indo-Pakistani battles in 1965, awaits reclamation; when developed it would be an agricultural hinterland for the Kandla port. In Kerala, between Quillon and Kanya Kumari, there is a fabulous stretch of ilmenite, monazite and zircon sands, which contains
material for atomic energy. Goa and Cochin on the coast are two important naval stations.

The East Coast extending from the mouth of the Mahanadi to Kanya Kumari, passes through three States, Orissa, Andhra Pradesh and Madras. Within it lie four of the five most important river deltas of India. The coast is 1,200 miles long backed by hills which are visible 50 miles away; the narrowest width, only 12 miles, lies not far from the port of Vishakhapatnam. The panorama of coastlands varies with the amount of rainfall and latitude. The north, where rains are heavier, is marked by swampy jungle seaface, dotted with mangrove and sand dunes; then the vegetation changes into bamboo shrubs, palmyra and coconut palms; while farther south cotton, toddy and palm grow.

The levels of the coastlands and sea are often indistinguishable, while the hills beyond are low, broken at places, and are easily negotiable, in contrast to the Western Ghats. Gaps as passages are not required here, and there are none; in fact the Eastern Ghats could hardly be described as mountainous. Therefore, from the point of view of terrain, communications with the interior are much easier from the Bay of Bengal than from the Arabian Sea. But other factors have inhibited passage, like the absence of many good harbours on the East Coast.

European powers pressed from the west in the beginning so that it was Broach, Surat and Goa which entered into strategic calculations. With the shifting of the area of struggle, and particularly after the decline of Portugal, Madras and Pondicherry figured as the bases of conflict, and the powers involved were Britain and France. Eventually it was from Bengal that the British built their empire. When the Suez Canal was opened, the West Coast jumped into limelight again; and now, with the emergence of power centres in East Asia and the construction of India's naval base in the Andaman Islands, the East Coast has again come into prominence.

As on the West Coast, so on the East there are a large number of ports, most of them small, some of great significance in the past but now sunk in value. In general, coastal waters are too shallow for ships to touch the shore, which therefore have to anchor more than 5 miles away. Even for small craft constant dredging is necessary.
Extension of ports for larger intercourse across the Bay of Bengal is a major development programme under the Five Year Plans. Madras is being developed to handle a great amount of sea traffic. From industrial and naval points of view, Vishakhapatnam is the most important port built in the post-Independence era. Of the two shipbuilding yards of India one is located here. Here is located also a petro-chemical complex. Its central position between the deltas of the Ganga and the Cauvery and proximity to mineral producing areas of the country hold out immense prospects of expansion and trade. Paradeep, in Orissa, 60 miles east of Cuttack, is another new port, the deepest draft port of India; it is the exporting centre of iron. The boldest engineering feat is in regard to the construction of Sathusamudram Canal in the Palk Straits separating India and Ceylon. Ships plying between East and West Coasts have presently to go around Ceylon. The canal will allow them to pass through the straits, thus causing a saving of distance by 500 miles; in this connection Tuticorin is being built as a major port and will play an important role.

The eastern littoral shares with the Ganga valley and Malabar coast on the Western Ghats the distinction of containing the country's densest pockets of population, concentrated mainly in the delta regions. The four Deccan rivers which rise in the western mountains and flow into the Bay of Bengal, are the gifts of the Western Ghats to the Eastern Ghats, daughters of the west married to the east, as they say, but are hardly any good for east-west communications. Their principal utility consists in irrigation and power. The Hirakund Dam Project on the Mahanadi and the Mettur Dam Project on the Cauvery are among the outstanding schemes bound with the welfare of millions of people.

6. THE ANDAMANS

Even though an important staging post in the British times, which the Japanese captured during the Second World War, the Andamans were looked upon by the Indians only as a penal settlement. That outlook is changing fast. Now the islands are being developed under the national plans, are represented in Parliament, and are having their links with the mainland strengthened.

The Andaman and Nicobar group constitutes some 200 islands,
ANDAMAN AND NICOBAR ISLANDS

Indian Oversea Possession Close to South-East Asia

of which five are large and well connected with one another. The total area is about 2,400 sq. miles. The population (in 1968) is about 75,000, of which about 14,000 are tribals comprising Onges, Jarawas, Nicobarese and Negrites; Negrites are the last remnants of a most ancient race which once upon a time inhabited a large part of South-East Asia.
The islands are known as a "gold mine of timber", of which there is a large variety. They are suitable for rubber plantation and hold out prospects of considerable mineral wealth in the shape of coal and iron deposits, nickel group of metals, and oil and natural gas. Fish abound along a coastline of 1,800 miles and in a fishable area of 20,000 sq. miles.

Port Blair in the Andamans is almost equidistant from Calcutta, Vishakhapatnam and Madras, about 850 miles. Only half that distance separates it from Rangoon, while the southern-most island, Great Nicobar, is only 100 miles from Indonesia. Thus the Andamans extend the range of India's security system and bring it close to that of the South-East Asian region. Under the Vishakhapatnam Command, Port Blair has now a naval base, INS Jarawa.

7. THE TRANSFORMATION

In the past India's great geographical variety was a factor of political disunity in the midst of cultural unity. Being of a fundamental character, this variety cannot be changed much, but its incidence on national life is changing. The Himalaya can no longer be reckoned as impassable and its great economic wealth is coming in for rapid exploitation. In terms of industrial power, the Eastern Plateau is gaining ascendancy compared to the Northern Plains which, howsoever dominant in the past, have few minerals and comparatively lesser prospects of heavy industrial undertakings.

The isolation of Northern Mountains and of Central Highlands, Western Ghats and Eastern Ghats is breaking down. Communications are growing and intimacies between various regions are being strengthened by rail, sea and air; no longer do distances press heavily upon the people. When telegraph lines run from one part of the country to another they do not speak the regional tongue, they know only one language, that of unification, and carry only one message, that of common bonds. Rivers are being harnessed to develop power systems of inter-zonal character, while the entire economic complex of production, distribution and use cuts across geographical lines.

A striking change lies in the disappearance of numerous centres of power in the country which a prolific train of rulers had
established in the past, helped considerably by geography. While one still hears of the “imperialism” of Delhi and the “tyranny” of the north over the south, the fact is that no one region has the capacity to overpower another. Unlike the past, military power can no longer be built in terms of bits and pieces of geography, for this power has become a vast, complex phenomenon which can be sustained only by the total and integrated resources. Viewed in the context of wars with China and Pakistan, the south, where are located factories for producing the main weapons, has become a prop of the north, where have been stationed a bulk of the fighting forces. And while the south is a cushion in the event of attack by land, the north is a cushion in the event of attack by sea. A scheme of defence in which the two parts stay apart would be a venture of suicide.
CHAPTER 4

GEOGRAPHY AND POWER RELATIONS

1. LOCATION AND CLIMATE

We shall now put India in a wider setting than that of the last chapter. First, location and climate.

Location

India lies in a very distinctive region of Southern Asia, which extends between 60 and 100 degrees east parallels of longitude and 5 and 38 degrees north parallels of latitude. The physical framework of this region is marked, in the north, by a chain of mountains rising from the Arabian Sea to the Pamir knot, marching eastward and descending to the sea; and, in the south, by the Indian Ocean along with its two embayed sheets of water, the Arabian Sea and the Bay of Bengal. A very ancient Indian poet mentions this fact.¹ Probably he had no clear picture of the physical boundaries, but he seems to have felt that a great, vital people, the Aryans, had landed themselves into a vast crucible of land and sea; this fact would be the cornerstone of Indian civilization.

¹ Uttaram yat samudrasya
   Himdreschaiya dakshinam
   Varsham tad Bharatam nama
   Bharati yatra santatin

(Vishnu Purana, II, 3.1.)

“The country that lies north of the ocean and south of the mountains of snow is called Bharat; there dwell the descendents of (King) Bharat.”

77
Four-fifths of Asia, the world's largest continent of 17 million sq. miles, forms India's roof. Some features of this gigantic mass of earth are, it will be admitted, a great human liability. Three-fourths of it are useless for agriculture and large tracts are arid for want of rain or frozen for want of heat. Hence the peoples of this region have always sought more hospitable regions, to which they have resorted in waves of migration, aggression or war. Today human ingenuity is trying to soften this heartlessness of the Asian heartlands, but has just about begun its work.

A great bulk of Indians' trace their origin to this inner Asia. There are five main racial strains in the Indian people. At the base perhaps are the Negroids, probably from Africa, but their traces are now all but extinguished. The Mongoloids come next who went deep into India and whose traces are markedly visible on India's northern border; they too have left only very few remnants. Austerics form the third layer. Perhaps they came from the Eastern Mediterranean or, as some suggest, from beyond Tibet; in their own time they went deepest into India, east as well as south, but again their influence has been marginal. Dravidians form the fourth layer, who came perhaps from Asia Minor—(or is it that some of them moved out to Asia Minor?). Finally, 3,500 years after the Mongoloids and 1500 years before Christ, there came the Aryans. Long before they came here, they had migrated from the south of Ural to modern Iraq, and then some of them had trekked to the Indus through Iran and Afghanistan. The most vital among the migrants, the Aryans, have been by and large the founders of the Indian civilization, though of course there is no such thing today as a pure Aryan.

Clearly, the mountain masses were no complete barrier even in those primitive days seven or eight thousand years ago. Neither climate nor altitude stood in the way of immigrants. If at all, things were easier, for space was ample, human opposition was less intense if not negligible, and there was, sure enough, little question of the violation of boundaries. The mighty, explosive problems of geopolitics did not afflict mankind.

But it was from the north-west, much more than the north, that migrations were continuous and sizeable. From the north-west the Aryans went on fanning out into the country, east and south, and spread over the entire land. There were numerous tri-
bes of them. But these numerous tribes never formed a single body, and as a body they never tried to hold the north-west. So there were more migrants from this side of the frontier, from Turkestan, Afghanistan, Persia and Arabia, right down to the nineteenth century when at last the British sealed off the frontier completely.

Many factors and forces of far-reaching consequence emerged from this situation.

Before the coming of Christ, the Aryan civilization, impregnated with Dravidian element, had worked out its base firmly in what became the Indian sub-continent. Since then it has received, absorbed and repulsed populations as well as influences from abroad, but has always retained its basic and distinctive character and vitality. It has dominated the Indian scene through all the tumult and turmoil of invasions from the Muslim or European countries, which hammered it but could neither oust nor destroy it.

It is this basic civilization which still dominates the Indian scene and will continue to do so in the foreseeable future. India’s search for power has no meaning except in terms of this civilization. At the same time it will be sensitive to the terrors of the north and north-west which have convulsed it so long, so deeply, and often so violently.

Having established themselves in India, the Aryans hardly if ever looked back upon the lands of their primeval ancestors; nor have their descendents. That frightful never-never land has held out no attraction for them; the intervening mountains have appeared more and more formidable; and the new land that is India has offered for century upon century in the past an abundance of the bounties of life. By geography, by fear and by lethargy Indians have been southward looking and south-bound; and today nothing seems to move up north here in a natural manner except the monsoons.

Central Asia has not only thrown out man but also his lines of movement. East-west passage across the Eurasian land mass has always been forbidding if not impossible. Only during the days of the Mongols did it develop with some speed and security, when the horse-riding couriers spanned Asia with the confidence inspired by modern railways. But that happened only during the
meteoric rise of Chchenghis Khan and did not last long. Today in-
ter-continental travel in Asia is negligible, taking place under a
miasma of restrictions and fear no less formidable than those of
the medieval times.

And so like populations, the transverse communication lines
across Asia have also been shifting down south. This has turned
India into a bridge between the east and the west, between East
Asia and West Pacific on the one hand and Africa and Europe on
the other. By the time the trans-Asian Mongol communications
broke down, the energy and technology of the peoples of the West
had received a tremendous spurt. One reason for these peoples
to come to the Indian Ocean and to India was that they were un-
able to make headway into Asia overland from across the terri-
tory of Europe.

The advent of Europeans highlights the second aspect of India’s
gEOGRAPHICAL position, its location atop the Indian Ocean.

As compared to the other two large oceans, the northern con-
figuration of this ocean is unique. The Pacific north is land-locked,
being part of a frozen, uninhabited world, while the Atlantic north
is only slightly better. The Indian Ocean, on the other hand, ends
up in the form of a gigantic bay. All along its arc great populations
have settled and flourished and some of the foremost civilizations
have been born. Jutting deep into this bay, with its unique penin-
sular shape, India has greatly influenced this part of the Indian
Ocean and has been influenced by it.

This peninsular thrust into the ocean has in fact divided the
great bay into two sectors of water in the shape of the Arabian
Sea and the Bay of Bengal, which can be much more easily nego-
tiated than the vast, southern sweep of the ocean. Traffic across
these two seas has been ceaseless and takes us back to one of the
most ancient times of human history. Discovery of the wind sys-
tem prevailing over the Arabian Sea gave it a fillip, as also of the
chain of islands facing the east coast of Africa. Every century
that has passed since those ancient times has added to the volume
of traffic between the east and the west. The communication
line has always been across the south of Asia in which India has
always figured as a bridge between continents and between oceans.
This has been true in the age of sailing ships and steamships, and
is now also true in the age of the jets.
And yet Indians have, comparatively speaking, not been a sea-faring people. Certainly there is evidence of Indian intercourse with the countries of Arabia, Africa, and the Mediterranean lands, as also with South-East Asia and the Far East. Indians have been building ships and even mounting naval expeditions. But adventure of the sea has been very much an exception with them. They lost their sea-borne trade as well as the art of ship construction to foreigners. A stage came when even a travel overseas became a stigma of contamination. As for co-ordination between the land-orientated northerners and the sea-orientated southerners, it was never forged till the advent of the British.

Here then one is confronted with a fact of Indian life of far-reaching importance. Indians have, no doubt, been southward looking but only upto a limit. That limit was chalked out by the West Coast and the East Coast. Just as they neglected the lands beyond the mountain border, they also neglected the spaces beyond the coasts; two vital regions which have so deeply moulded Indian destiny have thus remained practically outside the sphere of Indian endeavour. Having discovered and inhabited a sub-continent, they became its prisoners and have remained so for twenty centuries.

That there has to be a balance between an inward look and an outward look is at the heart of India becoming a powerful nation among nations.

**Climate**

Judged by the fact that the Aryan's greatest God was Indra and that he was also the weather God, climate seems to have received the utmost attention in India since times immemorial. Its two most important elements are rainfall and temperature. They are influenced by location, the nature of the surroundings, distant atmospheric movements, and conditions hundreds and thousands of miles up in space.

The important thing about India's rainfall is that it is monsoonal. Monsoons arise in summer during June, July, August and September, and are caused by low temperature and high pressure conditions in Australia, Africa and Southern Indian Ocean in
conjunction with the reverse conditions of temperature and pressure in North India. They account for nearly 90 per cent of the rainfall of the whole year, except in the southern part of the country. October and November are the transition period from the wet summer to the dry winter. Small quantities of rainfall are caused by the cyclonic depressions travelling from the Mediterranean during the months December to May.

The important thing about India's temperature is its excessive heat. Latitude, sun's altitude, winds, elevation and distance from the sea coast determine temperature. In winter months the mean minimum and maximum temperatures in most of north India are 40 and 65 degrees Farenheit respectively and in most of the peninsula are 77 and 84 degrees; in summer they become 70 and 104 degrees in one case and 70 and 97 degrees in the other. Temperature falls with the monsoons and there are extremes of temperature at places. During the monsoons relative humidity is 80 to 90 per cent throughout the country while in the dry weather it may be as low as 5 per cent.

Such then is the climate of India.

Climate affects the people in many ways. It influences population density, occupation, agriculture, and the periods of activity and idleness. It has a bearing on the quantities of water in the rivers and its availability for use. It influences the timing and logistics of war and the organization of peace-time activity. These and many other similar things are clear enough. What is not clear is the enormous cost that India has to pay, especially now, to live well under this kind of climate.

The report on the Census of India, 1951, records that the amount of rain that falls on Indian territory every year is something colossal—on the average 42 inches on every acre of land. One inch of rain per acre weighs 2,800 maunds, and so there are 95,000,000,000,000 maunds of rain falling on India's 810 million acres of earth.

But most of it comes during 4 or 5 months so that the rest of the year is left subject to drought. It may come too early or last too long; in either case crops are damaged. It may fall in terrific downpours within a short period and thus cause floods and waterlogging. Only one-third of the country has rain which is enough and dependable; another third has enough but not dependable;
the remaining third has neither enough nor dependable.

Kautilya talked about famines more than two thousand years ago, and so has every king, minister and administrator since then, trying at the same time to counter them and alleviate the sufferings caused by them. Today we build gigantic dams, power systems, irrigation works, fertilizer plants, port facilities and storage centres. On a modest estimate no less than two-fifths of the entire cost of the Five Year Plans during 1950-70 are likely to be devoted to this purpose.

This is visible. Invisibly the climate costs us infinitely more.

In his book *Mainsprings of Civilization*, Ellsworth Huntington argues about the profound influence climate exercises on civilizations. He notes that all great civilizations have arisen between latitudes 25 and 35 degrees north. Some civilizations have been more powerful than others. If, to take the last 500 years, some peoples are now “developed” and others “underdeveloped”, at least one reason for this lies in climatic efficiency, that is, the condition which induces inclination to work and physical and mental vigour.

Temperature has a good deal to do with this efficiency. Man’s internal temperature being 98.4°F, “the human body is so constituted that it functions best at temperatures of 60° to 70°F for people who wear civilized clothing and at somewhat higher temperatures for unclothed people.” Temperatures too far above or below these limits over prolonged periods cause conditions in which man gets easily tired because of too much heat or immobile because of too much cold.

In India it is heat that afflicts the people. Nearly half of the country in January, three-fourths in October, and the whole of it in April and May have temperatures above 87°F, which is quite above the optimum of 65°F suggested by Huntington. In fourteen of the eighteen capital cities of India, temperatures above the optimum prevail for 7 to 12 months.

No wonder that Indians “as a whole seem to be born tired”, and have found that the easiest way to adjust themselves to high temperatures is to do as little as possible. Their hearts, lungs and other organs are constantly under strain to prevent the internal temperature from rising; hence they are subject to enervating diseases. Their output in factories is low as is their yields in the
fields. Too much heat not only weakens the body but also takes away the energy of the soil. When soil can produce only tough, harsh type of forage, the growth of animals and production of milk are affected. No wonder, argues Huntington, that in India only a passive religion, such as Hinduism, can flourish, and non-resistance after Gandhi is the most suitable weapon against an opponent. Only under a great emotional upsurge can an Indian be excited to violent action but that is an exception.

So goes the argument about the enervating effects of climate. One need not be carried away by it; Huntington himself admits that there are at least two other factors influencing civilizations, heredity and culture. But the adversities of climate biting deep into the worlds of man, animal, vegetable and spirit are all too visible in India. They are all the more visible now when the population is mounting, the competition for survival among the nations is hard, and the energy to exploit the wealth of the country is greatly in demand.

Cold, rather than heat, has been a problem of Russia also, but in Russia half a century of great technological effort has had to be directed to the creation of those artificial climatic conditions which are conducive to efficient working in the midst of harsh environs. India has to do something similar to master climate rather than be mastered by it.

2. ROUTES OF INVASION

Location and climate have very largely influenced the routes of invasions against India since times immemorial. By its location, the Indian sub-continent has become a kind of pocket for the rolling matter of North Asia. Together, location and climate have rendered it hospitable and inviting and its inhabitants too soft and fatalistic to resist the aggressive violence of outsiders.

The North-West

In contemplating invasions, the north-west comes to the mind first, but India’s “north-west” has been changing with time. Once it was the whole of the great plateau west of the River Indus, a natural frontier of the Indian sub-continent, which rises from the Arabian Sea to the Pamir Knot and is presently shared by Iran,
Afghanistan and Pakistan. In the Mauryan times the north-west included Afghanistan, which but for short periods was subsequently beyond the control of Indian rulers. The plateau territory east of Afghanistan has been changing hands frequently. The British captured it and now it is a part of Pakistan. The Indian frontier has now moved down the plateau and been thrown east of the Indus, in imitation of one of the more violent frontier convulsions of the past.

The incessant shifting of the frontier line between the Indus valley and Afghanistan has been mostly the result of aggressive pressures from Central Asia and the Middle East. In the plateau there are seven main passes through which invaders have come: Malakand, Khyber, Gandab, Kurram, Gumal, Tochi, and Bolan. The Khyber route leads to Kabul and Moscow, Malakand route to the Pamirs and China, and the Bolan route to Iran. About the time the Persians came, that is, the middle of the first millennium B.C., these passes were well established as invasion routes.

The invaders included Persians and Greeks, Sakas and Kushans, Huns and Mongols, Arabs and Turks and Afghans, some of whom are of world fame and whose names are remembered by every schoolboy as his first lesson in Indian history. Some of the conquering heroes came and returned, like Alexander and Chenghis Khan; some established themselves in the borderlands and from there knocked at the doors of Hindu kingdoms, like Mahmud Ghazni; some made a thrust into the plain and never returned, like Babar. Peshawar, Gujarat, Gujranwala, Lahore, Amritsar, Karnal, Panipat and Delhi are the principal towns on the historic invasion routes.

Counter-attacks by Indian rulers have of course never been lacking. Believing as he said that “a monarch should be ever intent upon conquest, otherwise his neighbours rise in arms against him”, Akbar conquered Baluchistan and Afghanistan and held Kandhar as the keypoint of his frontier strategy; thus he became a precursor of what came to be known later as the ‘forward frontier policy’. Aurangzeb followed suit, and instituted a few tactical devices which were adopted by the British—establishment of imperial posts within the tribal territory, award of jagirs, grant of bribery, and pitting one tribe against another or ‘making one bone break another’, as he said.
One hundred and fifty years later, the British were at it again, particularly in the face of Russian claims and advances in Central Asia. Kandhar was occupied but given up, instead Quetta became a forward imperial post. The Indo-Afghan frontier was demarcated by the Durand Line. In the eastern hinterland, communications were extended and one of the railway lines went to the north of the Khyber Pass. When all this did not suffice to suppress the turbulence of tribesman, armies were sent, which later were supported by air power. Even then the British did not succeed, for right on the eve of the Second World War the northwest frontier was in revolt.

On this part of the world, then, pressures have operated for ages. The creation of a hostile West Pakistan, the infiltrations into Kashmir first in 1947 and then in 1965, and the Pakistani attack in 1965 in the region of the confluence of the two river systems of the Himalaya are thus a continuation of the long chain of history.

The Arabs

The Arabs, with their sea-faring instincts, chose a route different from the north-west. After contacts with India for many centuries, they decided upon conquests only in the seventh century. By then they had subjugated Egypt and Persia, usurped the communications between India and Europe, and developed a sizeable naval power. This forestalled the European naval supremacy by 800 years. Broach and what is Bombay today were the points of assault on the western coast. Overland, the Arab armies marched through Baluchistan and Sind and later penetrated into Gujarat and Malwa in the Indian interior. In a.d. 712 Muhammad bin-Kasim overpowered an Indian ruler, but his successors had difficulties. The Thar desert was hardly a suitable base for expansion in India, particularly when more than one Indian ruler rose to strike back. The impetus was further stemmed when there occurred the disintegration of the Arabian home base. In less than a century the tide of Arab onslaught ebbed, never to rise again, but it left its mark on the Indian annals.

The Europeans

The Portuguese sailor Vasco da Gama who landed at Calicut in 1498 repeated in some ways the Arab naval venture, although
it was not from the direction of the Arabian Sea but of the Bay of Bengal that a new empire under the British was eventually to be built.

Da Gama came with ships stronger than the Arab ships, at a time when the Arab shipowners had turned weak, Chinese shipping was limited by imperial decree, and no great power thought in terms of naval power. A Portuguese Viceroy, Dom Francisco de Almeida, said, prophetically enough: "As long as you may be powerful at sea you will hold India as yours; and if you do not possess this power little will avail you a fortress at shore." It was again a Portuguese, Albuquerque, who built a strategy of control of the Indian Ocean, dependent upon bases in East Africa, on the Red Sea, in Malabar and in Malacca. A century was to elapse, however, before European naval power was to tell upon India.

The seventeenth century saw a number of foreign trade marts, settlements and forts established on the eastern and western coasts—at Broach, Surat, Madras, Hooghly, Bombay, Masulipatam, Sutanati, Balasore. The fortunes of these establishments rose and fell with trade, with the relations of the newcomers with Indian princes, and with the power of the home governments, but the final balance-sheet was clear.

By the end of the century three British Presidencies were irrevocably settled at Bombay, Madras and Calcutta. These became the strongholds from where power radiated north and south, east and west, giving the British an advantage which no empire builder had had in the past. For, from the Mauryas to the Mughals, power was based upon the northern plain but it had no props in the south. To this advantage was added the British capacity to link the Presidencies by sea. Forces could be moved between Madras and Calcutta as exigencies demanded, and were safe so long as the sea lanes were clear.

Eventually Calcutta, a nodal point of the plain, became a crucial centre of power, for here was the gateway into the Ganga valley, and whosoever controlled the valley could also make a bid to overpower India. From the Presidency of Fort William, as it was called, the British moved west into Bihar, U.P., Sind and the Punjab and eventually to the vicinity of Persia and Afghanistan. It was also from Calcutta that a daring British commander, General Goddard, undertook in 1779 a march to Surat through the heart of
India, which showed that land and sea powers were combining and conspiring towards British supremacy. In the nineteenth century Burma was annexed, and once again Calcutta was the base.

The Japanese

When in 1944 the Japanese crossed the north-eastern border of India from Burma, yet another line of invasion was added to the list.

Compared to the north-west, the north-east of India has remained quiet and secure, principally because of the forbidding geography which is mountainous, forested and monsoonal, and where malaria, fungus diseases, typhus, dengue, blood-sucking leeches and water rats take a heavy toll of life. For ages the region has been a no-man’s land, but even the north-east has had its wars. The Burmese captured Manipur in 1815 and Assam in 1821, by methods of jungle warfare which evoke admiration even today; and the British fought back and recaptured them. As this was followed by British annexation of Burma, the defence of the north-east was no problem at all till the Second World War, when Burma was lost to the Japanese.

It was during this war that the Americans were forced to construct the famous Calcutta-Ledo road as a part of their strategy to supply China from India, and it was then that the Tokyo radio broadcast its taunt: “The Americans will accomplish two things by building this road. In the first place they will teach the British how to build roads—something they never have learned—and second, the road will be finished in time for us to use it to invade India.” The Japanese were right about the British but wrong about themselves, for they never used the Ledo road.

The Japanese struck in three division strength from three directions. One division attacked Tiddim and cut the Manipur Road which led to Imphal. Another crossed the Chindwin River at Thaungdut and headed for Imphal. The third crossed the Chindwin River at Homalin and marched on Kohima, with the further aim of cutting Imphal-Kohima road and Kohima-Dimapur road; and 40 miles beyond Kohima lay the rich prize of the Bengal-Assam railway. The operation lasted four months. The first of the three divisions was halted from proceeding north, and retreated in
reasonable order when the defeat came. The remaining two were severely mauled at Kohima and Imphal and retreated in bad shape.

This was one of the worst debacles of war for the Japanese, caused among other factors by the poverty of communications. The supply lines had been stretched too long and the Japanese failed to muster anything like the Allied air supplies which re-inforced Imphal. And precisely when the Japanese seemed to have overwhelmed geography, geography conspired to overwhelm the Japanese.

The Chinese

In 1962, China broke through the western and the eastern sectors of the northern mountain along routes always considered unusual.

There are records in Indian history of battles having been fought in Ladakh and beyond, in Tibet. In the late nineteenth century, the Russian generals prepared blueprints for invading India from across the Pamir and Karakoram. But the difficulties lay, and still lie, not so much in crossing these two mountains and capturing the plateau in their shadow, of which Ladakh is a part; they lie southward in the Great Himalaya with its gorges, snows and forests. The Chinese attack in this area had a limited objective, of consolidating the frontier and forging a link between Sinkiang and Tibet along the long southern border. An extension of the thrust was not attempted, but could be, considering the facilities which modern technology bestows. It is this prospect, so intimately bound with the security of Kashmir and then of the rest of the country, that has alerted India to the new dangers from the north-west.

The thrust through the passes in the eastern sector was also of a limited character, but its repercussions were more serious. The passes, which lie on the crest of the Himalaya, are in fact the main hurdles, and once they are breached the way down the slope is comparatively clear. In this region lie some of India's oilfields. From the foothills the Bay of Bengal is only 400 miles. Some Chinese soldiers in the course of their downward push must have smelt the salty air of the Indian Ocean, and this was a privilege which hardly any invader from Central Asia had ever enjoyed in
the past. This particular route of invasion, which is also close to East Pakistan, presents unprecedented dangers to India and is also bound up with the grand strategy governing the Indian Ocean.

So then India has been invaded from the north-west, from Sind, from the West Coast and the East Coast, from Burma and China, by land and by sea, in fact from every conceivable direction, depending upon the suitability of route, energy and resourcefulness of the invader, the support available to him from the home base and time and situation.

3. THE QUESTION OF TERRITORY

India covers an area of 1,260,000 sq. miles within a land frontier of 9,500 miles and a coastline of 3,600 miles. It is the seventh largest country in the world after the USSR (8,700,000 sq. miles), China (3,700,000 sq. miles), Canada (3,560,000 sq. miles), the USA (3,550,000 sq. miles), Brazil (3,300,000 sq. miles) and Australia (2,970,000 sq. miles). It is the second largest country in Asia, next to China, and, of its two other big neighbours, more than three times as large as Pakistan and four times as large as Burma. Five Indian States, viz. Andhra Pradesh, Madhya Pradesh, Rajasthan, Maharashtra and Uttar Pradesh are larger than Great Britain (89,000 sq. miles) and one, Madhya Pradesh (170,000 sq. miles), is larger than United Germany (140,000 sq. miles).

West to east, from the westernmost tip of Gujarat to the easternmost tip of Assam, India spans over 1,900 miles, while north to south, from the northernmost tip of Kashmir to Kanya Kumari, it spans over 2,000 miles. These are maximum distances, which, however, diminish along the various longitudes and latitudes. Across Madras the horizontal distance is only 450 miles thanks to the peninsular shape of the territory; it is the same across Kashmir which is of bulbous shape; while the southernmost Assam is only 20 miles wide. After the partition, in particular, India has acquired the look of a land to which patches of territory have been soldered here and there. This kind of configuration is in sharp contrast to the land forms of the three great powers, the USSR, the USA and mainland China, which are quadrilateral.

Depth for purposes of defence is therefore a variable factor in
India, changing from place to place. The fact that it is more in
the north than in the south explains why in the past invaders from
the north-west took centuries to establish their foothold in that
part of the country, while the invaders by sea overwhelmed the
narrower peninsula in a much shorter period.

The question of size, in conjunction with shape, is of great con-
sequence for India's power pattern and may be discussed in a
broad setting.

In geographical and political calculations the territory of a state
raises problems of great importance. The importance is of three
kinds. First, there is the point of sentiment and patriotism, of the
itch in the human system to grab and hold as much of the earth
as possible. Secondly, territory means land and land determines
the great pre-requisites of life, food, clothing and shelter as well as
the gifts of nature, the sun, winds and rain. If Chenghis Khan had
had enough of all these in Mongolia he might not have cared to
stamp upon Asia and Europe. With advances in technology land's
yield is growing and the more it grows the better for homes, fac-
tories and stores. And finally territory provides the base from
which a nation projects itself upon the world to seek respect, make
gains and cast influence.

"Among the acquisition of a friend, of gold, and of territory,
the last one is most desirable", says Kautilya.

How much land a people should have and why and how the
present distribution has taken place are some of those questions
never asked in polite society and often taken to the battlefield for
an answer. The fact is that the earth's land surface is distributed
very unequally. If it had been distributed equally, an individual's
share would have been 11 acres. But as things are an Indian has
got less than 2, Chinese 4, American 13, Russian 23, and Austra-
lian 190. Behind the realization of this unequal distribution there
has always developed an explosive dump of bitterness among the
have-nots which has burst out again and again in all ages.

It is certain that other things being reasonably equal, the larger
the state the more powerful and prosperous are the people and
the greater chance it has of becoming a first rate power, while

2 How Much Land a Man Needs is the title of a Tolstoy story. A peasant
was promised free all the land he could run round till sunset. He ran so
far that he never got back to the starting point and died of exhaustion.
small states can only be second rate powers. There have of course been small states like Britain and France which have wielded great power and built empires many times larger than their own size. The last world war, however, turned their wheels of destiny in reverse to where they belong, that is, small status, even though they still manage to look big with ingenuity and old momentum. Japan managed to look big for a while after conquering Manchuria and Korea but eventually shrank; so did Germany, whose Hitler was beaten by the limitations of space.

Three big states have, however, not only been able to hold their own in the rough and tumble and violence of twentieth century life but have grown bigger. The United States has annexed Alaska and the Hawaiian Islands. Russian conquests in Central Asia are now an old story, but not so the expansion into Siberia. This vast, no man's land, which the Mongols once refused to take because it was useless and which even the Russians once upon a time thought was worth no more than six roubles, has meant an addition of territory to the Soviet Union more than three times the size of India. Equally adventurous has been Russian entry into the Arctic Ocean, now of immense military and economic importance. One may be sure that the Antarctica would be the next target, and then the moon, the conquest of which has ceased to be mere moonshine. China is the third great power to expand, thrusting itself into Tibet and now looking upon the South-East Asian peninsula with ambitious eyes.

The two World Wars showed the great defensive power of space. In the second, Hitler's armies overran Poland in a few weeks because it had little territorial cushion, but they could not overrun Russia even after penetrating to Moscow, where they were almost swallowed by a frightful, ever-widening emptiness. Space has also helped China. For all their efforts to push themselves into the country, the Western Powers could penetrate but the fringes of it, while even Japan after subjugating so much of it found there was so much left.

Generals say that modern strategy, governed as it is by powerful, long-range weapons, needs large spaces, that dispersal of arms and men over wide areas is necessary to render them less vulnerable to attack, and that a good front is one farthest away from the base.
It would be interesting to contemplate the relationship between nuclear power and territory. The making of nuclear weapons places severe demands upon space, from the point of view of size, location and resources. It needs vast, barren lands far away from human habitation. Russia's great possession, the Arctic frozen lands, has come handy in conducting above-ground nuclear tests. The United States has only partly carried out the tests in its own territory which, however, is not large enough, so that it has had to go to the empty expanses of the ocean. Britain, a small country, has used Australia's Woomera desert for explosions, and France the Sahara and the Pacific. Nuclear testing can be done underground, but is expensive and does not yield the range and quality of weapons as open air tests. It would be correct to say that apart from technological know-how, from the point of view of space alone most nations would be precluded from membership of the nuclear club, unless some miracle of science enables tests to be done in the laboratory or the backyard.

India is a large country but an Indian's share of the earth is comparatively small and with the passage of years this share will grow smaller. The reason is that three-quarter million additional souls must claim their own share of it every year, for that is how India's population rises. It is true, as Jawaharlal Nehru once remarked, that there is a lot of vacant land in India which meets the eye in the course of a cross-country travel, but for that matter there is empty land in China also, much larger in area, and yet 25 million Chinese have migrated and settled in at least 10 countries of South-East Asia. Indian emigrants have been fewer, but that is because formerly the pressure on land was not so heavy. This pressure is now going to mount.

From the Indian point of view something went wrong with national territory right from the beginning of Independence. A military operation had to be undertaken to integrate Hyderabad and another to integrate Goa. While the Indian forces were pinned down in Kashmir, China struck and then Pakistan. The question then was not only of guarding this or that chunk of territory, but the whole territory against powerful forces. No country can get along with half its frontiers shaking under prolonged menace.

This problem of territory, then, would affect for long India's outlook on its neighbours, the total geopolitical situation, allian-
ces with nations, and many a national and international attitude.

Above all there is bound to be an anxious exploration of what
this territory means in terms of food, habitation, minerals, indus-
tries, strategic features, the sun and rain and winds, needed not
merely to exist but to hold one's own in what after all is a belli-
gerent world.
CHAPTER 5

NATIONAL LIFE AND RELIGION

In this chapter will be described the influence of religion on India’s political and military life. This should be read bearing in mind how in the past, as described in the first chapter, religion developed under the rise of the Indian civilization, the arrival of the Muslims and the impact of the British.

Presently we are concerned with Hinduism, which is India’s dominant religion. It is true that there are five other major religions of India, but Hindus are in an overwhelming majority. According to the last census, there were, in 1961, 380 million Hindus, 47 million Muslims, 10½ million Christians, 7.8 million Sikhs, 3.3 million Buddhists and 2 million Jains. Since Hindus, Sikhs, Buddhists and Jains have a good deal in common, Hinduism may be said to constitute the religious mainspring of 90 per cent of India’s population. For the first time in history it is developing unity of action with political and technological weapons in an area more than a million square miles. Its impact upon India’s future will be dominating and decisive.

In India the influence of religion is of three kinds. It gives rise to debilities and handicaps in the name of faith. It gives rise to militant and fanatic impulses also in the name of faith. And it gives rise to a moral and spiritual urge, again in the name of faith. Three different kinds of forces are thus worked up by re-
religion, which act and react upon one another, sometimes violently. India’s problem is to harmonize them and turn them into a stabilizing factor instead of letting them run into a riot of collision and disruption.

The Secular Character

Recalling what has been said in the first chapter, this conflict is inherent in the situation. Hinduism took its present form nearly 2,000 years after the coming of the Aryans. Predominantly inspired by Vedic faith, it also contains ideas and beliefs which are pre-Vedic or extra-Vedic. It postulates a vast cosmos extending over an unimaginable span of time; and also the idea of the Brahman, the soul and their mutual identity, of a large number of gods symbolizing reality, and of worship. Among its vital beliefs are the need for salvation and the inevitability of Karma. While essentially a matter of personal experience and realization, Hinduism has also built up a mass of philosophy in its support. Right from the beginning and throughout its development, it has been intimately concerned with the build-up of society, of the state and of the individual.

A barest glance at the Indian annals shows that religion has given rise to some of the sublimest ideas, produced some of India’s greatest men, and generated the most enduring impulses; it is indeed a highly distinctive factor in the making of a great civilization. At the same time, it has contributed to superstition, caste, disintegration of society, and emasculation of physical and moral effort. This emasculation was particularly highlighted by the onslaught of Islam. One-third of the Hindu population was lost to Islam during seven centuries of Muslim rule, and this happened because the Hindus lost political power. Religion became a powerful imperial device in the hands of the British and contributed largely to the break-up of the unity of the sub-continent and creation of Pakistan. This was a heavy loss because India is the only territory in the world carved out by the Hindus for their habitation.

After Independence, India became a secular state. The term “secular” does not exist in the Indian Constitution, even though some attempts were made to introduce it at the time of its fram-
ing, and has not been defined anywhere. But it embraces three concepts:

1. Separation of state from religion.
2. Freedom of religion.

First and foremost, there is no provision in the Constitution for a state religion.\(^1\) At the same time, the Constitution has no specific provision which bars the state from adopting a state religion—a contingency which perhaps could be envisaged only through a positive constitutional amendment. But it contains many references to religion.

Twelve\(^2\) of its articles are pertinent to the concept of secularity. By Article 27, no individual can be compelled to pay special taxes for promoting or maintaining “any particular religion”—implying perhaps that such taxes could be raised if the aim is to promote all religions. By Article 28, no religious instruction shall be provided in any educational institution wholly maintained out of state funds. Where the state makes partial aid available, no individual can be compelled to receive religious instruction against his wishes.

Articles 25, 26 and 30 bear on the freedom of religion. “Subject to public order, morality and health”, all persons are equally entitled to freedom of conscience and the right freely to profess, practice and propagate religion, and all religious denominations can establish and run institutions for religious purposes. The state can, however, regulate any economic, financial, or other secular activity which may be associated with religious practice.

Articles 15, 16 and 29 bear on the relationship of state with citizen. The state shall not discriminate against any citizen “on grounds only of religion, race, caste, sex, place of birth or any of them”, and there shall be equality of opportunity for all citi-

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\(^1\) In contrast, the Constitution of Burma, Article 21(1), as amended, states: “Buddhism being the religion professed by the great majority of the citizens of the Union shall be the State Religion”. Pakistan is a “democratic State based on Islamic principles,” as stated in the preamble to its constitution.

\(^2\) Articles 15, 16, 25, 26, 27, 28, 29, 30, 290, 325, 330, 332.
zens, irrespective of religion, in matters relating to employment. The state, however, could make special provisions in this connection favouring the socially and educationally backward classes. There shall be no communal electorates, although seats shall be reserved in the legislatures for backward classes.

The insertion of the above provisions in the Constitution does not mean and has not meant the insulation of state from religious affairs. These secular provisions are in fact not categorical and permit the state to interfere in religion subject to the restrictive clauses, and of this advantage has been taken. Legislation has in consequence been enacted by the States as well as the Centre in the name of religious reform or public order.

*Madras Animal and Bird Sacrifices Act*, 1950 was one of the first laws passed in this connection, clamping down upon the performances of sacrifices in temples. This was in line with an earlier legislation (not passed under the Constitution) called *Devadasis (Prevention of Dedication) Act*, banning temple prostitution on the part of Hindu women. Even more remarkable was the *Madras Hindu Religious and Charitable Endowments Act*, 1951 designed for temple administrative reform, by which a new department of government was set up headed by a commissioner of Hindu religion, with drastic powers to control and regulate the working of temples. Some parts of it were declared unconstitutional, but even in its amended form, which emerged in 1959, it establishes verily an ecclesiastical structure in the State, not strictly envisaged by the Constitution. Similar but less drastic laws have also been passed by a number of other States.

The Central measures include the *Untouchability (Offences) Act*, 1955, seeking to remove some of the social and religious disabilities imposed upon Harijans. A beginning has also been made with the codification of Hindu law, and in this connection certain aspects of marriage, succession and guardianship of minors among the Hindus have been brought within the purview of legislative enactments.

All these are brave attempts on the part of the rulers of new India but have been subject to criticism, as might have been expected. There are some who say that the government is not doing enough and others who say that the government is doing too much, thereby compromising the secular character of the state. The fact,
on the other hand, is that no government of India can possibly keep track of religion, with its enormous potency and ramifications and its capacity to affirm, assert and contradict. And while the state can only partially affect religion, religion can deeply affect the state.

Pros and Cons

There are, no doubt, people who think that religion should not be included among the factors which make for national power. Power after all grows out of tangible elements, such as the army, machine and atom, and is created and wielded by politicians, generals, financiers and scientists, and not by priests. It lies in politbureaus, military high commands and coffers of the banks, but it does not lie in the church.

True, there was a time when religion convulsed men into fanatic excitement and performance as nationalism does today, but that time, they say, is passed. It happened many centuries before Marx, our modern prophet, who teaches that religion is an opium of the people, or Freud, another modern prophet, who says that religion is an illusion. Millions of men and women all over the world would probably say the same thing out of their own experience. Some realities of life seem to have taught them that battalions mean more than gods, that in this world they must fend for themselves without much reliance on the divine, and that, as a matter of fact, they can do many things themselves now which once upon a time gods alone were said to be capable of doing. And they wonder whether they need delve much into the "other world", when this near world is so adequate, having so much to offer, explore, and find. This wide, wonderful world promises dividends hands down, while heaven, the God's stock exchange, is hardly the place for sure investment.

Cleverer people, such as politicians, have leapt beyond this simple thinking and decided that religion has little to do with statecraft. In the West, the more sophisticated part of the present-day world, religion is cut to size, given its place, and the affairs of man and of God, of the state and of the church, have been separated on the understanding that religion shall not intrude into political affairs. The authority of the state is pre-eminent and
overriding; political faith, not religious faith, is the nation's most articulate symbol. Rightly enough, one may say, the Big Ben, which chimes Britain out to the world, is perched on a tower of the House of Parliament and not of the Church of St. Paul.

This idea of separating the kingdom of earth from the kingdom of heaven is of course not purely Western. One supposes the great Mongol, Chchengis Khan, had also thought on the subject, if his seal, "The Seal of Emperor of Mankind", is any indication. For this seal has the inscription, "God in Heaven. The Kha Khan, the Power of God, on earth." The great Khan lived upto it, giving God one empire and himself another and keeping the two so scrupulously apart that in his own empire, apparently unnoticed by God, he became the most memorable scourge of history.

But now we must also look at the other side of religion. There are people who suggest that divorce between religion and the main processes of life is neither possible nor wise. Even in the West there are men of power who look spiritually insulated and yet do business with prayer-books in brief-cases; scientists like Einstein who remember and fear God even in the midst of great achievements; and statisticians who know that unless enlivened by a divine spark their charts and figures are grim and dead.

In the Second World War, both the capitalist and communist states used religion to arouse the patriotism of their peoples. Franklin Roosevelt, the American President, said: "Storms from abroad directly challenge three institutions indispensable to Americans now as always. The first is religion. It is the source of the other two—democracy and international good faith. There comes a time in the affairs of men when they must be prepared to defend not their homes alone, but the tenets of faith and humanity on which their churches, their governments and their civilization are founded." And in his famous national appeal of July 3, 1941, when the Red Army had met disasters at the hands of the Germans, Stalin touched upon the traditional religious sentiment of his countrymen, even though it meant a denial of communism.

Divinity is inducted even into the British military code, for as

the Articles of War say: “On the British Navy, under the good Providence of God, the Wealth, Safety and Strength of the Kingdom chiefly depends.” Rudyard Kipling’s hymn of the empire is even more famous:—

God of our fathers, known of old,
Lord of our far-flung battle-line,
Beneath whose awful Hand we hold
Dominions over palm and pine—
Lord God of Hosts, be with us yet,
Lest we forget—lest we forget.

In everyday life in the West, a priest is very much in demand. He is wanted when man is born and when he dies. To wear his crown the British Prince of Wales must go to the house of the Cross, not of the Big Ben. A Catholic, even when President of the United States, must observe the ritual of confession to a priest and a chaplain is a part of the apparatus of the American Congress. The Bible is dovetailed into the processes of justice. In many countries the clergy are given military ranks and uniform and they accompany armies as they fight. From the point of view of morale, it is found that soldiers in distress wish to have priests beside them rather than prime ministers.

A Nietzsche may continue saying that religion is dead, but even if he is a prophet of the West, which he is not, he is not a prophet of India. Vivekananda said that “the Hindu man drinks religiously, sleeps religiously, walks religiously, marries religiously, robs religiously.” Today he plays his politics also religiously. “It is only in India,” he added, “that a most perfect scoundrel can seek redemption and get it by building a temple, proceeding on a pilgrimage and agitating for the protection of cow.” One day perhaps we may discover that the best way to sell Marxism in India, with all its materialistic dialectics, is through a man wearing saffron robes and a caste mark.

Politicians may not talk about it, no documents may appear on the subject, no specific law may be passed or code established, but one knows that religion colours the Indian way of life and propels a large sector of the population into action in practically every field of endeavour. It has divided a sub-continent into two
states, and an easy way to cause a war between them is to light a communal fire. It has its imprints upon the Constitution of India. The processes of implementing the Constitution are influenced by religion. It is a factor of foreign policy. Economic planning and social chores cannot ignore religion. Religion prods, knocks, pounds us all the time.

What to do with this religion, how it will bear upon India's future are yet unsettled questions. There are those who find many aspects of religion repulsive. Others would not let it impinge upon matters of state. Yet others feel that not only does it stand in the way of political maturity, it disrupts the state. On the other hand there are some who are equally convinced that a state uninspired by religion has no future, that in these days of cold war religion is an anchor which India can let go only at its peril. Then there are the "ultras" who believe that religion is not only an anchor but a springboard which can put the country into an orbit of power.

Religion does not of course mean the same thing to these different people. To some it means faith in spiritual experience. To others it means social ideals and values. To yet others it means fanatic adherence to one's own beliefs and an itch to demolish those of others. The man in the snow-cave wrapped in the infinite, the man who dusts ants off his path lest they should be killed, and the man who splits his neighbour's scalp over faith are all under "religious" impulse. With its countless combinations and offshoots, religion affects Indians and their institutions in myriad ways and shapes.

1. THE CURBS OF RELIGION

Religion and Democracy

We may now trace the brakes of religion on national life. First and foremost, there is its influence on the democratic ideas and institutions which India has chosen for itself since Independence. There is a general appreciation of the depths of Indian religious experience and acknowledgement of the relevance of some of its tenets to the confounding problems of today. Not many observers, both foreign and Indian, are, however, certain whether Indian faith
can respond properly to the political calls of the time.

Percival Spear,\textsuperscript{5} for instance, has collected the more outstanding characteristics of Hinduism, measured them in the scales of democracy and found them wanting. Equality, he says, is one of the principles of democracy, but the Hindu way of life in which caste gives the grading and sex demarcates the status cannot be conducive to democracy. There are of course the affirmations of equality in Indian scriptures: “The wise man considers with equality the Brahman endowed with learning and humility, the cow, the elephant, the dog as also the dog-eater,” says the Gita. But such wise men have never been many. The doctrines of Karma and transmigration have in practice worked out as retrograde impulses, and Karma has been a positive brake on material betterment. Individuality is a great democratic tenet but a redoubtable seeker after Nirvana would rather have it dissolved than developed. And how can the schizophrenic Hindu, clinging to the shell of world renunciation, possibly accept the complex, heavy burden which democracy imposes upon the citizen today?

According to another foreigner, India is floating neck-deep in a dangerous decade.\textsuperscript{6} Caste is its greatest curse. Despite constitution and legislation casteism is rampant. The untouchability act has not been very effective, as a Parliamentary report acknowledges,\textsuperscript{7} and some 55 million scheduled castes still remain the injured men, insulted by those peculiar cruelties of Hinduism on which finger cannot be laid easily but which do operate. India is a country where if one caste lapses, another sprouts. The Kammas and Reddies in Andhra, Brahmans and Maharas in Maharashtra, Anvil Brahmans and Patidars in Gujarat, Lingayats and Vakilgas in Mysore are all looking ahead to a long life of factious competition and separatist empires, and this makes the “vaunted unity” of Hinduism vulnerable.

“Of Hinduism”, says an Indian writer, “it is difficult to say anything with confidence. The Hindu social system has suffered and recovered from many shocks, and Mahatma Gandhi’s attack on untouchability as well as disintegrating influence of Western ideas

\textsuperscript{5} India, Pakistan and the West.
\textsuperscript{7} Estimates Committee, Second Lok Sabha, 48th Report, p. 20.
may yet leave it basically unaffected. The question whether it possesses the spiritual resources on which the Hindu community can build its destiny cannot yet be answered.\(^8\)

A proof that all this is not a mere intellectual exercise came from the *Report of the Committee on Emotional Integration*. This Committee was appointed by the Government in 1961 to find out the causes of fissiparous tendencies in the country. Were these causes, a questionnaire queried, due to (a) economic malaise, (b) language tensions, (c) religious differences, (d) lack of a common ideal or goal? The answers showed that “of all factors responsible for creating differences, casteism, communalism, religion and linguism are the most potent.”\(^9\)

Millions of Indians have throughout the ages been powerfully influenced by an ascetic outlook on life. Since the days of the Buddha this outlook became even pessimistic, and from this point of view many would regard Buddhism as the bearer of a calamity. The yellow-robed monks, the product of Buddhism, who founded monasteries and stupas and those beautiful spots called *caityas* looked very colourful indeed, but the Buddha could hardly have foreseen them that way, for he bequeathed a bleak, funereal doctrine of “birth is sorrow, every wish unfulfilled is sorrow”; and he prescribed the Noble Eightfold Path as remedy. But it has been no remedy, for the Hindus have ever since looked as if they are the standing emblem of human tragedy, suffering from sorrows more than the rest of mankind. To this is attributed a good deal of their listlessness, escapism,emasculating and imperviousness to incentives.

*Impact of Non-Violence*

Possibly the new patterns of society would help generate economic incentives, but what re-conditioning could be done to another doctrine—non-violence? Initially not a part of the Aryan faith, it has nevertheless been digging in deeper and deeper into the Indian soul and causing vital dichotomies in the use of force. Millions of Indians have shunned soldiery and in times of danger

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\(^9\) P. 181.
preferred to run to the temple rather than the battlefield. Some have refused to take to the plough for fear of killing insects. Even today an average Hindu would feed the sickliest of cattle rather than relieve it of its pain with knife.

Gandhi gave non-violence a sublime expression, saying that it was behind all his five major activities of life, untouchability, khadi, village uplift, Hindu-Muslim unity and fight for freedom. "I have been practising with scientific precision non-violence and its possibilities for an unbroken period of over fifty years. I have applied it in every walk of life, domestic, institutional, economic and political. I know of no single case in which it has failed."\(^{10}\) Factory civilization could not be built on violence, nor could democracy, nor a nation, nor good life, he said.

In the 1930's it was feared that the tribals of the North-Western Frontier would overrun India if military posts were withdrawn but, said Gandhi, this could not happen if India were non-violent "For me the defence forces are of the least importance in the make-up of the nation," he added. But the tribals did come and overrun Kashmir. And fifteen years after his death the Chinese overran NEFA.

Even after the Chinese attack, the choices over the question of force were not final. While armies were raised on one side, there was on the other side a talk about the futility of war, the solution by non-violent methods, and helping the war effort "non-violently".

In December 1962, an American\(^ {11}\) visited India and interviewed a large number of people, including the President and the Prime Minister. In particular, he watched the activities of the Bharat Sarva Seva Sangh, a society with Gandhian ideals, in relation to Indian defence against the Chinese threat. He saw an interesting spectacle.

These members, he said, "would not use guns: they would not kill people, they would oppose compulsory military training, even for a segment of society; they were sickened by the rifle drill for women, including girls in college." But they had concluded, he found, that it was right for the country to resist the invader


and that they would support the war effort. Some suggested that non-violent resistance should be organized right on the border, but then thought the Indian army might nip this project in the bud. Then a foreigner had a brain-wave: might there not be a peace march from Delhi to Peking? So fourteen men set out on foot for Peking.12

Meanwhile the members intensified “constructive” work to help war effort: they made warm uniforms. How the making of uniforms was more noble and constructive than making ammunition to stem the invasion was not clear, but here was a way typically Indian. By this kind of sophistry Indians have for ages been able to palm off the sinful duty of spilling blood to a very small minority of their brethren.

Military Implications

Indian self-complacency has had some curious military repercussions.

Buddhism was born in India and spread far and wide, as we know. For many centuries its power attracted foreigners to India and impelled Indians to visit foreign countries and establish external contacts. Eight or nine centuries after Christ, however, it all but faded out of the land of its birth. Hinduism swallowed it, and yet it imbued little of its magnetism or the zest for adventure which drives peoples to pastures new. While Islam travelled from Syria to Sinkiang and Morocco to Malaya, and Christianity fanned out from the shores of the Mediterranean to America, Europe, Asia and Africa, Hinduism stuck by and large to the same old land as is described in chronicles now twenty centuries old. It clamped travel and forbade search beyond certain fixed horizons; and, curiously enough, while it made the mind and the spirit swell and envelop the entire universe and roam into all creation, it chained the body to the physical landscape.

One often wonders why India hardly if ever developed weapons comparable to those in foreign lands. How is it that Indians hardly if ever distinguished themselves in this task which has had so much to do with their existence? One also wonders whether they

12 The march was abandoned as the Chinese did not issue the necessary visa.
knew well enough what was happening outside their own homes, their own borders—whether they cultivated what may be broadly described as the art of intelligence. In ancient texts one reads of the six prongs of statecraft called sadgunya: peace, war, waiting for the enemy to strike the first blow, attack, alliance, and deception. One wonders why of all these, the third prong, that is, waiting for the enemy to strike the first blow has been the one most frequently used throughout history.

There can be only one plausible reason: Indians have had little impetus to venture beyond the pre-ordained borders and confront themselves with situations requiring new ideas and techniques.

Let us take a few examples.

In 326 B.C. Alexander appeared at India’s gateway, having crossed the sea, desert and forest, broken up the Persian empire and subdued the heady Turks and Afghans. His was no surprise advent and should have been known in the Punjab. The task of defence was however left mainly to a solitary king, Porus, who again was harassed by rebels in his own family.

The gallant king marshalled his men and elephants and chariots on the east bank of the Jhelum, and waited for the enemy to strike the first blow. The initiative of crossing the river was left to Alexander. The river was swift and half a mile wide and it rained, but the foreigner accomplished a surprise crossing. Alexander’s army was perhaps half as big as the Indian, but it was trained, had defensive armour which covered the body, a pick of horses from the Middle East, and, above all, catapults to fling stones as well as darts of which Indians had little knowledge. Indians wore no armour, their wicker-shield covered with ox-hide was flimsy, their chariots got stuck in mud, and their elephants trampled friend and foe alike.

In A.D. 1526 came Babar. About a century before this, firearms had begun to be known and practised in countries west of India. They were crude then but were quickly improved, and soon handguns, muskets and howitzers of increasingly better designs became a prized possession of armies. Indian knowledge was confined to what was called rockets but these were mere fireworks, and not firearms in which missiles are shot by the force of gunpowder explosion. At the battle of Panipat, while Babar’s army had handguns and artillery and a fine breed of horses, his opponent, Ibra-
him Lodhi, not a Hindu but a thorough-bred Indian, mustered a force composed of second-rate cavalry and a motley crowd of foot soldiers, which all collapsed. Babar then moved to Agra, where he built a large mortar which he used against Rana Sanga. In the battle of Khanwa this mortar fired burning hot stone balls and the smaller guns fired bits of stones, the like of which the Rajputs had never encountered before.

In A.D. 1565 was fought the famous battle of Talikota between the Muslim alliance of the Deccan and the Hindu empire of Vijayanagar. The scene of battle lay on the bank of the River Krishna. To the south of the river the Hindus assembled a huge army of ill-armed infantrymen and cavalry on poor horses. Its rockets were ineffective and artillery pieces antiquated. The Muslim army was about one-third in strength, but by its contacts with Persia and beyond the alliance had secured better arms, good horses, and armour-clad troopers with a powerful bow much superior to the bamboo bow of the Hindus. As in the days of Porus, the Hindu army waited, partly dug in trenches, and was surprised by a deceptive crossing of the river. In the fierce battle which followed the Hindu army was destroyed or crippled, after which the Vijayanagar empire was wiped off the map.

A hundred years later the Maratha army under the great Shivaji made a name. It did well in the mountain areas where guerrilla tactics were successful and efficient horsemanship provided mobility of indispensable value. The arms were simple, including half lance, sabre and shield, and so logistics were also simple. Muslims, who formed the opposing forces, had muskets and field fire arms, which were however not much of a success against difficult terrain and the elusive Maratha. But in due course the Marathas too were enveloped in the ancestral curse, getting backdated in weaponry and insulated against new ideas.

This is how the Maratha army looked to a British soldier when it fought Tippu Sultan in 1794:

The park of artillery, where the guns are collected, made an extraordinary appearance. The gun carriages, in which they trust to the solidity of the timber and use but little iron in their construction, are clumsy beyond relief; particularly the wheels which are low and of large solid pieces of wood united. The
guns are of all sorts and dimensions. (They are mostly venerated for their ancient services, but now unfit for use). Were the guns even serviceable, the small supply of ammunition with which they were provided has always effectively prevented the Maratha artillery from being formidable to their enemies...¹³

In 1962 China invaded India, and the old bugs were at work again. While India was signing in 1954 a friendly pact with China, China was planning a road through Indian territory of which most Indians had no knowledge. Indians knew little about the significance of the happenings in Tibet, including the Chinese military build-up. The Himalaya had rung down a thick, mighty curtain of stone on the northern frontier and most Indians thought there was little beyond it except rocks and lamas. The Chinese break-through into NEFA was a surprise. Equally surprising was the fact that while a complete "philosophy of NEFA" existed, little existed by way of its security. In the best traditions of the third principle of sadgunya of statecraft, the army was deployed in a defensive position, waiting for the enemy to strike the first blow. One of its finest divisions took the field and was beaten just as the best of Rajputs had been beaten. Its rifles were of the 1914 era and radio equipment was obsolete, and it had little of good road-making or jungle-clearing machines. As always before, the army was out-manoëuvred and outfought on its own land.

The Indians said: "We did not know. We did not expect the Chinese to come, we were not ready. We did not have enough men, enough weapons, enough plans. We are men of peace, we only defend, the enemy is aggressive." Surely, that is not only the NEFA refrain, it is India's refrain of all times.

2. RELIGION AND POWER IMPULSE

The Ultras

In discussing the second type of influence of religion in India, we come across a class of people who are Hindus first, last and all the time. We may call them "ultras", from the fact that they can be extremist. They consider that religion is a companion as well as promoter of political power. They know about the weaknesses of religion and yet say that the country's malaise is due to

¹³Cited from Military History of India by Sir Jadunath Sarkar, p. 50.
irreligion, are impatient and even militant. Above all they are proud of the glory of the past which wore a religious halo, and want it to be resurrected to provide inspiration as well as patterns of life.

To visualize the great old times is not easy, shrouded as they are in a haze of antiquity, but glimpses are possible. Aurobindo described them as the age of Dharma, when the Aryans "never lost sight of the spiritual motive, never missed the touch of the religious sense." In contrast with the present day rulers, the kings were then dedicated to Dharma—"that which conduces to welfare in this life and to salvation in the next." This "next" world led to the framing of a scale of values, a spectrum of rights and duties, quite different from modern values, which are purely mundane. To listen to the counsels of the rishis was obligatory. Kings guided by wise men did not become ruthless or dictatorial, as the secularized political dictators do today; power was under the control of the powerless Brahmans and politics did not exist apart from religion.

Within this broad framework of life and thought, kings waged wars. Fighting was not shunned and the shedding of blood was no sacrilege. "War was generally accepted as a normal activity of the state, even by Buddhist Kings," as Basham says in his Wonder That Was India. To millions of Indians today the great Mahabharata War makes a fascinating reading. Non-violence was an aspect of Dharma, but Dharma could exist apart from non-violence.

The ultras suggest that instead of abnegating spiritualism, the state should fathom its storehouse, which is inexhaustably rich for all situations. Today, an Indian patriot sings:—

He who lays down his life in the battlefield  
Fighting for the freedom of his fatherland  
Gets bliss after death.\(^{14}\)

This is not new, for Lord Krishna also told the same thing to Arjuna: "If slain you will go to heaven."\(^{15}\) And the state could make use of it with powerful effect.

\(^{14}\) Contemporary Indian Literature, Sahitya Akademi, New Delhi, 1959, p. 5.  
\(^{15}\) Gita, Chapter II, Verse 37.
The first verse of *Isa Upanishad* says: "God the ruler pervades all there is in this universe. Therefore renounce and dedicate all to him and then enjoy the portion that may fall to your lot. Never covet anybody's possession." If politicians and economists make use of this, Indians will understand socialism the better.

In his Choruses from "The Rock" T. S. Eliot asks: "Where is the wisdom we have lost in knowledge?" As if anticipating this query the *Gita* prescribed a prayer: "May God enlighten our intellects" so that we are wise. This is the verse which the American atomic scientist, Oppenheimer, quoted, objecting to the building of the hydrogen bomb and protesting against the divorce of intellect from wisdom.

And the Vedic verse "May we sit together: May our hearts be united: May our thoughts be the same!" is as good as any theme of the United Nations.

How far back the ultras go is not clear, but, they say, the farther the better, for antiquity of religion provides no end of pride to Indians. Even though history points to the middle of the second millennium B.C. as the period when the founders of the Vedic faith came to India, the vast Hindu multitudes would be surprised that their forefathers are just that old. They would indeed trace their origin to the very beginning of creation and consider that Brahma, Vishnu and Siva are absolutely beyond chronology. Of this trilogy the God Brahma initiated the cycle of no more and no less than 311,040,000 million years, only half of which is now over. This may be a fiction, but it has roots and it gives stability to Indian life.

Of those wonderful times, the ultras tell us, the Aryan was the hero, fair and handsome, a go-head, virile, conquering type, very modern. For an 'underdeveloped' country such as India, the technological superiority of the Aryans would be a point of topical interest. From a tactical point of view they introduced a new weapon, chariot driven by horse. Power provided them with the necessary security cover for the effulgence of their remarkable genius. For them life meant movement and search for new domains in the spaces of earth and of mind, and possibly their great attainments were due to the conjunction of these two dynamic impulses.

Buddhism came and cast a shadow on Aryanism and then came Islam. Nothing irks the conservative ultra today more than Islam.
Indians are said to be forgetful of history; they certainly are not forgetful of the history of the Muslim incursions. For centuries Muslims had a field day in India, when they slaughtered the "kafirs", pulled down their temples, forced conversions and inflicted humiliations. Synthesis between Islam and Hinduism is mentioned and in this connection the accomplishments of Akbar, Kabir, Nanak etc. are quoted. And yet, unless one shuts one's eyes, the synthesis never matured and all the songs of Amir Khusro heralding unity went in vain. The Marathas, Sikhs and Rajputs of the seventeenth and eighteenth centuries signalized native patriotism, Hindu revivalism, and revolt against the untouchable foreigner. Hinduism, the ultras remind, has had a rough time since then, one net result of which is that it lost three hundred thousand square miles of territory to an Islamic state.

This is important but even more important is the fact that Hinduism has survived. How has this happened?

Militarily speaking, it has survived because of its great mass just as an army survives because of its big size. There were piles and heaps and mountains of Hinduism raised by millions of people over many hundreds of years, which it was impossible to destroy. A great living mass that it was, it had no high command, no one dominant institution on which it depended for guidance and control and without which it would go to pieces. No single individual or single body was indispensable. Indeed, religion was dispersed among countless people, each one of whom was capable of oozing and spilling around his faith and of becoming a law unto himself in time of need. It survived as armies survive in war, by breaking up into pockets and through split initiative and discipline. Finally, it bought existence with space, for pressed in one corner it found refuge in another; and it repeated this manoeuvre for hundreds of years.

Religion does not die in this country, it lives, and it must colour the national future; the break from religion which secularity implies is only temporary. The ultra of today is not always logical, but he is a child of faith, having something of the mystique of the Aryan, something of the West, something of the anti-West and something of the anti-Islam. He is perhaps the religious equivalent of the social revolutionary described by Robert Towers in his novel, The Necklace of Kali—"the Indian of the organized mob,
the sharp-featured militant of the streets and factories, the new Indian of the big cities ... the thin cutting edge of a weapon only recently forged and hardly yet in use”.  

**Hindu Nationalism**

In modern times, the story of Hinduism joining hands with nationalism may be traced back to the nineteenth century, when Swami Dayananda Saraswati, the founder of the Arya Samaj, sought not only to reform Hinduism but infuse it with a militant force. Balgangadhar Tilak continued his work in a way. His scholarly commentary on the *Gita* said that Lord Krishna’s call to action was applicable not only to the religious but also to the political field. In Bengal, the great writer Bankim Chandra Chatterjee wrote *Bande Matram*, “Hail to the Mother,” which became the famous national song of the Congress. And, in the hands of Aurobindo Ghosh, patriotism and ancient faith became one, for he said: “Nationalism is not merely a political programme; nationalism is a religion that has come from God.”

In the twentieth century three parties have spearheaded militant religion. The Hindu Mahasabha is the oldest, having been founded in the Punjab in 1907; among its chiefs were the eminent Lajpat Rai and V. D. Savarkar, the latter a great disciple of Tilak. In its history of over half a century it has backed the Indian National Congress, disassociated itself from it, turned anti-Muslim and anti-West, seen good days and lean days and now bad days, but it lighted the fires of Hinduism for others to carry along. The Rashtriya Swayamsevak Sangh (RSS), a stormy petrel of Hinduism, came into being in 1925. Allied with the Hindu Mahasabha in the beginning it developed gradually its own chores, and while it said it kept aloof from politics, it aimed to develop political power and even raised its guerrilla battalions for this purpose who did active work during the days of partition. In 1951 it led to the formation of a separate but allied group sworn to political activity. It is this group which on the eve of the first General Election of 1952 became Bharatiya Jan Sangh—a body separate from RSS and yet deriving sustenance from its fiery leaders and stream-lined storm troopers.

Half a century ago, when the first politico-religious party was formed, Hindu aims were modest and mild. Lala Lajpat Rai's programme of 1925 laid stress on innocuous activities like Hindu festivals, Hindi language, physical culture for Hindu youth, and discussions in temples. This programme holds good today, to which other items have been added, in particular those which have rendered it strident and aggressive.

The ideals and programmes of Jana Sangh, which were well publicized on the eve of the elections in 1962 and 1967, are something like this.

The national consciousness in India has ancient roots, centuries older than the advent of the British. Men like Nehru say otherwise but this is because of their inferiority complex. Let us free ourselves from the false notion that nationalism in India began under the British rule. With all respect to Gandhiji let us cease to call him the "Father of the Nation." The Sangh is proudly conservative, seeking, as it says, to take the nation back not by two or three hundred years but two or three thousand years. The Hindu alone, who has been living in India, is the son of the soil. And as for the rest, some of them came to seek shelter and, as masters of our home, we gave them shelter; while others came as invaders and again as masters we fought them. Sometimes we won, sometimes we lost.

On two important political themes the militant Hindu leadership has categorical views. First, about Pakistan: it was begotten in fear and error, and somehow the process would be reversed. Muslims in India are described as "living Pakistan walking on two legs." Secondly, about communism. The conflict in the world today is not of democracy and communism as appears to superficial observers. "It is the age-old conflict of Dharma and materialism; communism stands for the latter."

The Jana Sangh has been wanting to amend the Constitution...

**17** M. S. Golwalkar, the leader of RSS, has put it thus: "Historically, this (India) has been one country. Because a man professes any particular sect or any particular way to approach God, that does not take away his nationality. If this be accepted, the people living on the other side of the border but actually in our country, should be treated as ours. Therefore we have been saying that the independent existence of this State (Pakistan) which, as many of our great leaders have said, was born out of a sense of hatred, should cease." *In the course of interview, April 3, 1966.*
and declare India a unitary state in place of a 'Union of States', as at present; to encourage private enterprise and minimize state planning; and to abolish doctrinaire distinctions between public and private sectors. It stresses cultural values, derived from the ideals of Bharatiya Sanskrit and Maryada. It does not believe in weakness and considers that India's old culture and tradition could be welded into present day political and economic structure to turn out a strong nation, a true Hindu Rashtra. It would liberalize the Arms Act in order to extend the use of weapons to as many people as possible.

Till such time that Pakistan exists as a separate state, India should follow a policy of reciprocity towards it, that is, tit for tat. The party makes no disguise of the fact that it looks to the time when this artificial country would go to pieces. In regard to China the party would not confine itself to mere protest notes and ad hoc devices, but retaliate with force, expel the Chinese from occupied areas, and prepare for a long-term confrontation; it would reverse the policy on Tibet and help Tibetans emancipate themselves from the Chinese yoke.

It is not easy to say what factors have influenced electorates the most in Indian elections. Religion has certainly not been one in any of the four elections held in India from 1952 to 1967. There have been numerous kinds of vote-catchers during these elections, party fanatics, village bosses, Government officials, industrialists, traders, holders of patronage, outright bullies and those plain-speaking fellows who offer "note for vote"; and priests have not been among them. In the elections of 1967, not emotive issues but hard facts of life such as food scarcity, rising prices, devaluation, loss of faith in planning, and persistent weakness against neighbouring aggressors led to the landslide defeat of the Congress from which other parties benefited.

And yet in the materialistic hurly-burly of elections in 1962 as well as 1967, a factor of no mean emotive appeal was the cow. For instance, a pamphlet seized in Varanasi posed the following questions:

(i) Even when bullocks are in great demand, why are 30,000 cows being slaughtered every day?
(ii) In this predominantly religious country, why beef alone is served in Ashoka Hotel?

(iii) Even when cow-slaughter was banned under Muslim rulers, why has the Nehru Government launched a programme for building new slaughter houses at a cost of Rs. 800 crores?

And a slogan was: "A vote for Congress is one cow less." On the eve of the 1967 elections, a country-wide agitation to ban cow-slaughter was carried out, which did influence the electorate in favour of the Jana Sangh.

Jana Sangh's record in elections may be summarized as follows:

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<td>Assembly</td>
<td>116</td>
<td>5.4</td>
<td>264</td>
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The record may be assessed negatively as well as positively. For example, in 1967 out of a total of 149 million votes polled for the State Assemblies, the party polled only 8.75%, trailing far behind the Congress (40.10%) and scoring not much better than two other All-India parties, Swatantra (6.82%) and Communists (two factions, 4.60% and 4.23%). In the four State legislatures of the south, it won only 7 out of 870 seats. On the other hand, its cadres showed rare fervour and discipline, it improved its position consistently, and, as a result of the elections, it participated in the coalition Governments of three States, and also became the third largest party in Parliament.
Religion and Gandhi

Finally there is the third kind of influence which religion exercises, and that reminds us of Gandhi.

In modern times Gandhi's has been a most powerful voice against the estrangement of politics from religion. The great Mahatma sought to fuse the religious with political, social and personal conduct. Those who separated them, he said, did not know what was what. From charkha to satyagraha, to fasting, to vows and ahimsa and sex, to political parties and governments, to non-violence and truth—they were all of one piece.

But the piece was split, as we know, even in his lifetime. His constant incantations of 'Truth for me is God' or 'Where love is there is God' had something of the Upanishadic grandeur and abstraction which confused people. Many winked when he wrote: "The Rishis who discovered the law of non-violence in the midst of violence were greater genius than Newton. They were themselves greater warriors than Wellington." Good many of his central ideas based upon profound religious convictions were not pressed after his death. Therefore when the bullet took his life, an era ended. Almost all his followers who obeyed and admired him were simply spirited away from his world; others who talked about the shedding of political power, constructive work, and bhodan were described as "unconventional leaders", that is to say, old, honourable bores with insufferable followers.

Goethe once said: "Every extraordinary person has a certain mission which he is called upon to fulfil. After he has accomplished it he is no longer needed on earth in this form, and Providence makes use of him in something else." Did then the Gandhian voice have to give way to other compulsions and values, to a search not of God, Truth and Non-violence, but perhaps of steel—which is bread?

And the inmost voice of the poor
Who are half-starved, ill-fed
Is surging, threatening and thundering
As they are clamouring for bread:
‘We’ll bury God under the ground
And visit His tomb on our nightly round,
Set fire to creeds of men that rave,
To burn as incense on His grave.’

Thus wrote a modern Indian poet. Did Gandhi’s mission then break up in a country where God was being buried?

But no Indian seriously trusts that this has happened. Religion has been promoting a host of missions for many centuries of Indian life and civilization, and if presently the Gandhian mission does not have the success expected of it, then the defeat may be of the man but not of religion. Religion cannot be defeated in this country, no matter what happens. There might be little religion in the Constitution, reports of the Planning Commission, or documentaries of the Films Division, but it is there all over the country and with millions of people.

The argument proceeds on some such lines:

The first half of the twentieth century passed through sick times, produced sick minds and made a sick world. In 1947 India was caught up in emotion and tragedy. Religion, or what passed for religion, was delivered a knock-out blow; it turned ugly, and it became the lever for partitioning the sub-continent.

Still, it was the only basic, deep-rooted power to which India owed so much culturally and politically. When, with the passage of years, the emotionally surcharged leadership which was in jitters with the disintegration of belief, ceases to be at the helm of affairs, new perspectives will appear. By then also the old ideas of socialism, democracy etc. which have thrown religion off its pedestal would have been tested for what they are worth, not in distant Britain or America, but right here in India. Then would be the time for religion, which is now channelled off its course, to resume its normal course and acquire its legitimate position of prestige and honour.

The task is then to rehabilitate religion and ultimately to bring about its renaissance, so that the individual, the nation and the world benefit. This can be done in three ways; by declaring that religion is a fundamental necessity of life and therefore no com-

18 Contemporary Indian Literature, Sahitya Akademi, New Delhi, 1959, p. 120.
munity should be deprived of it; by declaring that religion has a practical bearing on the day-to-day affairs of men and therefore its divorce from the state is unrealistic and even dangerous; and by declaring that religion promotes political strength. It is this last thesis which has acquired militancy and aggressiveness on which we have spoken.

The Religious Craving

But, first of all, religion is a fundamental necessity. This is because there exists a power above men, because this power impinges upon men, and because in the mind and heart of man there is an urge to grasp this power. It is true the urge has exhibited itself differently with different peoples in different parts of the world in different ages. It has also led to disputes, conflicts and wars. Its manifestations and symbols, which are so many and so diverse, have confounded men. But while this is so and while there is no book, document, proof or physical demonstration of this power or urge, there have been everywhere and at all times some extraordinary people who have testified to its existence. You simply cannot wipe it off by the acts of legislature.

It is the function of religion to go on telling men that this power is there, to build ways and means of keeping faith, and to help satisfy an irrepressible longing. It may be said, as indeed it is in Hindu religion, that this mystical state otherwise also known as 'spirituality' is a matter of personal experience, of self-realization of a self-created system which establishes contact between the individual and the cosmos, and that no such external agencies as religion are necessary. But that involves an over-rating of the capacity of men and under-rating of the role of religion. Men do not find self-realization easy. They want guides and gurus, they want to lay hands upon the experiences of the past, they want symbols and signposts, they want scriptures, they want their temples and their own saints, gods and incarnations. Religion supplies them all these and gives an unfailing helping hand, and serves as a bridge between this world and the other world which men seek.

From spiritual faith men derive solace and joy, a sense of achievement and completion, a ray of light in the darkness surround-
ing them, and a better understanding of fellow men. It does good not only to the individual but to the world at large. "We wish that spiritual life may once again blossom here, that here in Europe thoughts may continue to grow and shape the face of the world," said Werner Heisenberg, a noted scientist.  

Many savants in the orient have also wanted spiritual life to grow in the east and travel all over the globe. There may be some differences in opinion as to what spiritual life is, but there are no differences regarding the necessity of a religious approach if we wish to resolve the two major problems of today: the conflict between the peoples and the conflict between the constructive and destructive possibilities of science.

In one of the seminars in which a few foreigners were present, Vinobha Bhave, a redoubtable follower of Gandhi, said that this approach could be based on three fundamental principles. First, we should agree that life be built upon the three pillars of Truth, Love and Compassion. Secondly, we should hold that all life is equal and all forms of life are sacred. And, thirdly, we should believe in the continuity of life after death.

There is an Indian touch in this, particularly in the suggestion of life after death—although, when scientists like Erwin Schrödinger say that "physical theory in its present stage strongly suggests the indestructibility of Mind by Time," an approximation of Western and Indian thoughts is visible. In any case India is the one place, if there is any, to experiment upon and test and foster universal principles rooted in religion. This great potential should not be lost by unrestrained and irresponsible declarations about secularity.

Religion and Reconstruction

Religion should not be divorced from state. Why and how did India come to be a secular state? It made an excellent start by choosing Satyameva Jayate, "Truth Alone Conquers", as motto and inscribing the wheel of Dharma on the flag, for both these

symbols go to the core of its thought and tradition. But having done this, it struck an untraditional secular path. If secularity is inspired by foreign models, then we do not know these models. Some Western states call themselves secular, but secularity divorced from religion, what has this done to them? Professor P. M. S. Blackett, an eminent scientist and thinker, observes:

It would be interesting to draw up a mark-sheet for bad conduct over the past five hundred years between the behaviour of the Christian West and the non-Christian rest of the world for such qualities as bigotry, greed, ferocity, inhumanity and vandalism. Giving marks for the destruction of the civilization of Mexico and Peru, the religious wars and persecutions, the slave trade, the plunder of Bengal, the humiliations and disasters imposed on China, white racialism, two world wars in half a century and finally Hiroshima and Nagasaki, the West would tot up quite a tidy score.  

India seems to have overlooked the long-range repercussions of secularity, but even otherwise where is the correct parallel between secular India and secular West? Most Western states do have a national religion, state-aided religious bodies, and a common ground where the political and the religious meet and are on talking terms. In relegating religion to the backyard India has done even worse than China.

It is an error to imagine that man can by himself look after his faith. In general he cannot. He has always wanted help, a genial environment and proper atmosphere. In the past, in India, as in other countries, this help came from the state, from wealthy individuals and from spiritual-minded communities. That is how temples arose, shrines were maintained, scriptures took form, and the people were led on the spiritual path. The logic of a socialist pattern of society, which India is trying to form, is this that there will be little spare wealth with individuals or private bodies, which could be diverted to purposes other than their own use. The spare wealth reposes in the state, and when the state does not have spiritual incentives, those religious institutions, societies and communities, which once used to flourish and for which India is noted.

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22 Punch, September 3, 1958.
will have to fend for themselves and devote a considerable part of their energies to the sheer need of existence; therefore their work must suffer.

India needs religion for the gigantic task of reconstruction. Once Indians were slaves and now they are free and learning to live in freedom. Once they were poor and now they must be well off. Is religion not needed in all these? That would be strange, for religion has political, social and ethical values. These values are well-known and are widely respected, and would be particularly handy today when many inspirations which are impelling India are of a novel kind. Take the Constitution. How many of India's 500 millions have read it or understood it? For a long time to come the masses of people will not discover in it any particular force or magic; it will in fact remain the preserve of a very small intellectual minority. Religion is still a factor of patriotism and unity. Now that the state possesses such powerful apparatus to mould public thought it should not be difficult to inculcate some of those religious sentiments which breathe love for the motherland.

Democracy and socialism which India has adopted need many things beyond a constitution, parliament, courts, panchayats, and worker-employer councils. There has to be a temper and climate of democracy. Also there has to be mutual goodwill; this will come if there is a spirit of tolerance and compromise, which in India is best imbibed the religious way. Socialism is not merely equalization of opportunities by public tests and selection, by votes and by taxation and distribution of wealth; it is an outlook on life involving charity and sacrifice, and these are religious virtues. Patience and the capacity to get on with very little are other religious virtues for which India is famous; Indians have even made a virtue of starvation. The builders of the welfare state know too well that it is precisely the irreligious who are ruthless, and who, the moment they are convinced that they are being duped by leaders, will start mobbing Ministers and burning down public houses.

And so the debate goes on over the role of religion in national life. Meanwhile, one cannot fail to observe some of the challenges
facing Hinduism. It has no central organization or establishment, which can unify, consolidate and direct its influence. For a state which calls itself secular, this is an advantage, but for a society drenched in religion this is a disadvantage. For many centuries past, Hinduism has been unable to withstand the onslaughts of foreigners, thereby either seeking what is politely described as synthesis or simply going down and lying prostrate. Presently, it must develop power not only to countenance religious fanaticism from abroad, which can be as violent as ever, but also to keep communal peace at home. Nationalism is of course the answer, but again whether nationalism can be developed without the support of religion has yet to be seen. In any case, Hinduism is not making its full contribution to nationalism. And towards international problems such as peace, disarmament, population control etc., the contribution of Hinduism is nil.

Much exploration needs to be done in India’s religious experiences and achievements, which are so pre-eminently rich. Considering the prolonged thinking done on the subject by some of the wisest of the world’s men born in India, it should be possible to discover factors which contribute to the unity, stability and strength of the country, are morale raisers, and serve as counterblasts to the disruptive ideologies to which peoples are subject.
INDIA’s experience as an independent state is short and as yet incapable of providing an elaborate exposition of political faith. It has still to produce a Burke to expound democracy, a Mill to dilate on liberty, and a Montesquieu to talk of the spirit of laws. But it has adopted a political philosophy, embodied in a highly detailed constitution.

The Indian Constitution is a most important reservoir of the Indian way of life. It is the symbol and the guardian of its unified, independent and manifold existence. It is a source of inspiration and an indicator of objectives, tasks and institutions. It is a factor of national power and international influence. So long as India does well it will attribute a good deal of success to its political philosophy and technique but no sooner does something go wrong than will these come under fire. It is a well-known fact that constitutions are among the first targets of all leaders of revolution.

In this and the succeeding chapter we shall examine the Constitution, some of its main principles and motivating forces, its apparatus, its resilience and strength as well as susceptibility to strains and pressures, remembering that the stability and continuity of the national life of India are so largely conditioned by it.
1. THE CONSTITUTION

By the Constitution adopted on November 26, 1949, India has become a "sovereign, democratic republic", as the Preamble says, with the aim of securing four objectives for its citizens:

JUSTICE, social, economic and political;
LIBERTY of thought, expression, belief, faith and worship;
EQUALITY of status and of opportunity; and to promote among them all
FRATERNITY assuring the dignity of the individual and the unity of the Nation.

India is a republic, having done away with over 500 princes and princelings. Its territory is formed by the remnant of old India after the partition of the sub-continent. The British provinces and the princely states were merged, and the country was divided into new units determined on an administrative, political and linguistic basis; in the last analysis language was a decisive factor in the new scheme of division.¹

First and foremost, the Constitution lays down the citizen's fundamental rights. These are under seven headings: Right to Equality, Right to Freedom, Right against Exploitation, Right to profession of Religion, Cultural and Educational Rights, Right to Property, and Right to Constitutional Remedies.

By the right to equality all titles are abolished, except military and academic awards; untouchability is forbidden by law; and there is equality of opportunity in matters of public employment. Under right to freedom falls the celebrated Article 19; by this citizens have the right to freedom of speech, assembly, association, movement within the Union, residence and settlement, acquiring property and practising profession. The right against exploitation forbids the practices of employment of children in factories, traffic in human beings and imposition of compulsory service. The right to freedom of religion enables citizens to enjoy freedom of conscience and free profession of religion; however, under it the state can control certain religious practices, prohibit religious instruction in its own schools, and prevent imposition of taxes for reli-

¹ 17 States have been formed on the basis of 15 languages.
gious purposes. Cultural and educational rights include protection of certain linguistic and religious rights of minorities. Under right to property, no person can be illegally deprived of his property. And finally, constitutional remedies are guaranteed to an individual, an institution and the state by the right to move the Supreme Court.

The Constitution lays down Directive Principles of State Policy, which, while providing motivating forces, cannot be enforced in courts, unlike fundamental rights which can be. Of special interest among these is the provision that wealth will not be concentrated and the ownership and control of the material resources of the community will be dispersed and distributed (Article 39); this is the core of India’s socialist pattern of society. There is also the provision of free and compulsory education for children “until they complete the age of fourteen years.” And Article 51 embodies the spirit of India’s foreign policy:

To (a) promote international peace and security;
(b) maintain just and honourable relations between nations;
(c) foster respect for international law and treaty obligations in the dealings of organized peoples with one another; and
(d) encourage settlement of international disputes by arbitration.

The Union of India operates three organs of state authority, the executive, legislative and judiciary, and has adopted a cabinet form of government on the British model. The President is the topmost executive, elected for a period of five years by the Houses of Parliament and legislatures of the States. He exercises his powers “in accordance with this constitution.” Next lower on the executive ladder, after the Vice-President, is the “Council of Ministers with the Prime Minister at the head to aid and advise the President in the exercise of his functions”, as Article 74(1) says. It is this important provision which makes the government of cabinet type. The legislature consists of two houses: the Council of States or Rajya Sabha, which is elected by the representatives of States in their respective legislatures, and is not subject to dissolution, its members retiring and being replaced periodically; and the House
of People or Lok Sabha, which is elected from territorial constituencies for a period of five years. Since money bills can be introduced only in the Lok Sabha, it has more financial powers than the Rajya Sabha. Finally, there is the Supreme Court, the highest judicial body of the Union, with original as well as appellate jurisdictions as laid down in the Constitution. Its judges are appointed by the President and cannot be removed except by an address by Parliament.

The executive, legislative and judicial patterns of the Union also obtain in the States: instead of the President there is a Governor, instead of the Rajya Sabha and Lok Sabha there is a State Assembly (and also a State Council in some States, which thus have two houses of legislature), and instead of the Supreme Court there are the High Court and subordinate judiciary.

Under exceptional circumstances, as defined, Parliament may make laws for the whole or any part of the territory of India. For normal purposes, however, the Union and the States have been given their subject-wise jurisdictions in terms of the Seventh Schedule. This Schedule contains the Union List, the State List and the Concurrent List of subjects.

The Union List contains 97 items including the armed forces, arms and ammunition; foreign affairs, war and peace; railways, posts and telegraphs; currency, insurance, banking and customs; industries as decided by Parliament; and such matters as fisheries, films, oilfields. The State List consists of 66 items including police and public order; local government and public health; agriculture and forestry; tolls and duties of various kinds; education, with certain limitations; and such matters as gambling, liquor and treasure trove. The Concurrent List includes criminal law and preventive detention; marriage and divorce; welfare of labour; inland shipping and navigation; factories, ports, stamp duties etc.; altogether 47 items.

In emergency, proclaimed under Article 250, Parliament may assume complete legislative supremacy. In that event the State List becomes in effect the Union List or Concurrent List, and while the State Legislature may continue to function, it becomes practically a limb of Parliament. There are other links between the Union and the States, such as the Governor, appointed by the President, and inter-State Councils.
There are some features of the Constitution not usual in such documents. Part XVI contains special provision relating to certain classes such as the Scheduled Castes and Tribes and the Anglo-Indian community who are given concessions in regard to representation in the legislature and employment. Another part deals exclusively with Official Language which eventually would be Hindi in replacement of English: no end of heat has been created by this in India’s political life. Yet another deals with regional languages, 15 of which are constitutionally recognized, and a whole chapter is concerned with the language of the Courts. Six Articles of the Constitution deal with elections. Emergency provisions are contained in Part XVIII. Emergency is declared when the security of the country is threatened by war, external aggression or internal disturbance, and this is done by the President by means of a proclamation. During emergency the central authority may give what directions are necessary to the States, may make laws as it considers fit, appropriate to itself what subjects it desires from the State List or Concurrent List, confer powers or impose duties, reorganize financial structures and taxes, and suspend judicial proceedings.

2. THE NOVELTY AND LENGTH OF THE CONSTITUTION

The first thing to notice about the Constitution is that there was almost nothing like it in the past. The Arthashastra and the like, as mentioned in our first chapter, were not constitutions but general guidelines of government without any legal status in the modern sense; they could not be enforced unless the ruler so desired. The basic mainspring of government came not from political treatise but from the Vedas and other religious texts, and Dharma rather than law was the principal inspiration. The government revolved round kingship, which, even though conditioned by several moral restraints, was politically a dictatorship. The people in general had practically nothing to do with the affairs of the state, except in minor spheres or except when it suited the rulers. In the fact that the state and society kept largely apart lies a most crucial difference from what obtains today, when the state impinges deliberately upon and seeks to transform society.

“The State”, says Article 38, “shall strive to promote the wel-
fare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life.” To have said this in the days of Manu, when social order was unchangeable and eternal, would have been blasphemous.

Things were worse under the Muslim rulers. Under the British the best that happened was the institution of the Government of India Act, 1935, to which the origins of the present Constitution could be traced. This Act, however, provided a mere skeleton, which again was mutilated at places, with very little in it of the life and spirit, the sheer abandon and ambitiousness in respect of objectives and goals of the present Constitution. The western liberal ideals had affected India for no more than a century and touched only the upper layers of society without permeating to the people at large; and they had not affected the princely States at all, which constituted a third of India.

To hundreds of millions of Indians, then, this Constitution is a novelty, a great, bold adventure, and will remain so for generations to come. It will even appear to contain material contradicting history, traditions and a few long-cherished modes of thought and conduct, which a large sector of society would find difficult to digest. Inasmuch as it requires not only a vast array of complicated rules but also a great body of conventions for its implementation, Indians would have to be a well-educated and understanding people to live under its aegis. Only time and patience can unravel its merit, and the merit should be such as is visible and tangible and not merely resting in an inert mechanism or the facile declarations of constitution fans.

The Indian Constitution is a copious document, relentlessly copious. As is well known, it took three years to be finalized. Since some of the keenest, most brilliant and even most loquacious men of multifarious ideas took a hand in its making, millions of words were written and spoken. In the Constituent Assembly as many as 7,635 amendments were tabled and 2,473 were discussed, and the document emerged with 395 Articles and 100,000 words, which render it the longest of its kind in the world.

Napoleon once told Talleyrand that a “constitution ought to be short and clear”, to which Talleyrand replied, “No, Sire, it ought to be long and obscure”. It would appear that while China
went by Napoleon’s advice, India went by Talleyrand’s. For the Chinese constitution has only 106 Articles, each one of which is short and pithy, and it has no more than 6,000 words altogether.

The length of our Constitution shows good intentions of the constitution makers, who wanted to make it as impeccable and as little open to chance and the caprices of men as possible. For very long had Indians been ruled by kings, satraps, and viceroys, who were adepts in using the instruments of power fitfully. Now, backed by a constitutional guarantee, the common man would be protected against autocratic rule.

And yet the Constitution has not turned out to be as thorough-going as intended. For, between 1949 and 1967, it has already been subjected to twenty-one amendments, “some of them introducing vital and extensive changes in the original document”.  

Compare this with the American constitution which from 1780 to 1967 has been amended only 25 times; the first ten amendments, effected within the first two years, became a part of the constitution, two amendments were concerned with prohibition and cancelled each other, and four amendments were of a minor nature, so that real vital amendments have been only nine. There is perhaps some advantage “in the flexibility of the Indian constitution and the simplicity of its amending process,” but in that case Napoleon’s advice would have been more suitable.

India’s problem is to learn to live with the fact of a long constitution which is likely to give rise to intricate legalities, endless elaborations and interpretations and debates, a vast machinery of law courts, a locust swarm of pleaders and advocates, a bookload of routines and procedures, a multitude of litigants who are ever in search of legal loopholes, and a network of executives and administrative meshes which trap citizens.

Where there is too much law, people spend most of their time chasing it or being chased by it, rather than becoming lawful.

In India, as probably in some other countries, judicial machinery is slow and thousands of undecided cases accumulate from

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2 Lok Sabha Secretariat, Constitution Amendment in India, 1962, p. 9.

3 The 25th amendment to the Constitution of the USA was effected in February, 1967, authorizing a Vice President to become Acting President whenever the President is unable to perform his duties.
year to year. If justice should be quick, inexpensive and simple, it would not be so under an intricate democratic constitution and might tend to be muffled under formalities. Complicated judicial apparatus and legal hair-splitting may give rise to a breed of touts one meets around the houses of justice, who are a notorious cause of corruption.

3. FREEDOM AND DEMOCRACY

The Constitution makes India a "democratic republic." But what democracy is, how it has fared, what the strength of its basic concepts and forms is, are all still open questions which India has to answer. The popular definition of democracy as a government of the people, for the people, by the people is only popular, without being much of a definition.

With all the things said about democracy in the nineteenth century, it has had rough times in the twentieth. In Europe where it was born, all countries did not adopt it; in the period between the two world wars fascism was out to destroy it; and hardly had the Second World War ended when communism not only began pushing it around but hoisting it to its own flag.

When both Burke and Marx declare themselves patrons of democracy, there is bound to be a confusion. There is the democracy of India, Britain and the United States and also of Russia and China. In Pakistan there is basic democracy, in Nepal guided democracy, in the U.A.R. presidential democracy and in certain African states total democracy. Franco, the dictator of Spain for a generation, explained once that his was organic democracy. Under democratic cover Pakistan and Burma swung into military rule, Argentina dispensed with Presidents, Brazil staged a civil war, Turkey hanged its leaders, and Vietnam got torn up.

In France, the land of liberty, equality and fraternity, the story of democracy is not inspiring. As early as March, 1796, while issuing his first famous proclamation, Napoleon Bonaparte found that people had tired of liberty, equality and fraternity; he promised them instead food, spoils and fame. There has been a col-

4 According to a statement laid on the table of the Rajya Sabha on August 11, 1967, there were 3,05,891 cases in arrears in India's 16 High Courts.
lapse of one republic after another in France. In pre-war France there were twelve political parties and they all swore by democracy. They also swore by humanism, Jacobism, Marxism, clericalism, Catholicism, colonialism, communism, in fact, by all possible "isms" so exhaustively that there was none left untouched in the 150 years of the democracy of France. When in 1958 Charles de Gaulle came to power there lay behind him two mutinies in the French army and collapse of the Fourth Republic and ahead of him four years of war in Algeria which was to cost 400,000 lives; that was not a tribute to democracy. How can you govern a country which has 227 varieties of cheese, he moaned. For him, therefore, not so much the battle cries of liberty, equality and fraternity as the simple dictum of Louis XIV: *La Nation, c'est moi*.

Nowhere has democracy been accepted as anything but adulterated good. There is always the fear of unions, corporations and federations of trade, industry, labour and civil service. There is the distrust of the soothing demagogue, a universal specimen. There is the lack of faith in the capabilities of voters. There are the heavy election costs and waste of energy through ceaseless frictions engendered in the name of freedom. To these are added casteism, communalism and regionalism in India.

Experience shows indeed that democracy changes with time and place, has no uniform chores, is easily vulnerable and frequently dishonourable. It is inconceivable, looking at the future, that any country, much less India with its short-lived experience, will be permitted to pursue its democratic ideals and practices with ease and comfort. Already some of the basic values and instruments of democracy are being questioned and tested, and whether these will live up to the desires, hopes and needs of the people is yet to be seen.

The idea of freedom represents one of those fundamental values which is bound to come under strain. Broadly speaking, the Indian concept of freedom allied to democracy accords with what the International Commission of Jurists has said on the subject. Its central theme is the Rule of Law. The Rule, as stated in the Act of Athens, "springs from the rights of the individual developed through history in the age-old struggle of mankind for freedom; which rights include freedom of speech, press, worship, assembly
and association, and the right to freely elect representatives of
the people and afford equal protection to all." The Preamble to
India's Constitution reminds us of this Rule, as do many of its
Articles.

But this notion of freedom is not as tenable as it appears. Arti-
cle 19 which grants the right of free speech and expression, has
already been amended when it was found that it was being used
to preach secession from the country. The amendment was
effectuated in the interest of the "sovereignty and integrity of India",
after which the criminal law was changed so as to make the
advocacy of secession an offence, and every judge of the High
Court and Supreme Court was required to take the pledge that
he would uphold the Constitution. Here then was a case of a
deeply cherished ideal succumbing, partly, to the storms of time
within less than a decade and half.5

But apart from this, shall we not say that there has been too
much stress on the rights of the individual and too little on his
obligations and duties? In other words, the Constitution does
not give an answer to the great poser of Gandhi who was once
asked by H. G. Wells what he would consider as the rights of
man. "But first I must know what his obligations are," he said.
Under democracy, the people take long to know their obligations,
hence the lack of a sense of responsibility, the absence of a fear
of consequences, the lowering of standards, and the wide gaps
between desire and reality, conception and execution, planning
and performance.

This notion of freedom has been further assaulted powerfully
and on a wide social front by communists. There is no point,
they say, in harping on freedom in the abstract or in the vacuum.
The purposes it serves and the relationship it bears to the prob-
lems of life are important. For instance, freedom from what,
is a question that must be answered. Anatole France wrote the
story of a man who longed to be put in prison so that he would

5 Article 226 has also been criticized. It gives the High Courts power
to issue certain types of orders or writs for the enforcement of rights, a
privilege exploited by miscreant elements to delay or frustrate justice.
Similarly, corrupt officials have made use of the provisions of Article 311
to delay or frustrate disciplinary action.
have a roof over his head; for him freedom meant confinement and only release from a long round of misery.

A Russian writer puts the problem thus:

Leaving aside all the humbug we find that there are two conceptions of freedom: individualistic freedom and genuine, communistic freedom. The former is product of private-property society and finds answer in egoism and hostility. It is based on exploitation of man by man and social inequality. The bourgeois state, bourgeois law, morality and religion are the means of maintaining that system. No wonder Pope John XXIII in his *Mater et Magistra* encyclical, upholds the inseparability of private property and freedom . . . . The communist conception of freedom regards every individual not as sole self-sufficient 'monad', not as existing something by itself and for itself, but as an element of society, as cell of the social organism . . . rights and duties, freedom and necessity, are just as inseparable as right and left—one cannot exist without the other.\(^6\)

This problem of the rights and duties, of freedoms and restraints is bound to crop up again and again in Indian political life. The answer will not come easily or quickly, for the process involves no mere constitutional provision and enactment of laws, it needs the development of an outlook, the training of a community, and implicit faith in the mainsprings of political life.

4. THE IMPACT OF DEMOCRACY

Rosy as well as gloomy pictures have been painted of the impact of democracy on the Indian scene.

Adult universal franchise has been granted, as a result of which 250 million people (in 1967) can exercise vote; a little more than half this number has been actually doing so, 61 per cent in 1967. As many parties as possible can be formed, ideologies and opinions can be freely built, and maximum latitude is given for devising the means of approaching the electorate. The Election Commission has a reputation of efficiency and fair-

ness. Legislatures have been formed as ordained and have been functioning even though sometimes with a display of rowdyism. The judiciary has earned high reputation for itself, and consequent confidence of the people. The executive has no doubt been subjected to criticism, as being not efficient enough or as being power hungry or as being corrupt, but this cannot be attributed solely to a democratic form of government.

The people can protest. Methods of protest fall roughly under three groups. Under the first fall mass rallies and meetings, processions, demonstrations before legislatures, press agitation, and distribution of handbills and posters. Under the second come fasts, hartals, strikes, picketing, and squatting before or blockading the houses of leaders. And under the third come riots, destruction of property or means of communication, revolts and secessionist attempts, and mass leave-taking to immobilize government offices. From January, 1964 to August, 1965, 2,909 agitations took place in India, 592 of which turned violent.7

The above processes, even though not all adequate or happy, have created new ferments in Indian society. The individual, granted certain constitutional safeguards, feels he has a value and his existence has a purpose beyond his personal chores or immediate environment. He is a part, however insignificant, of the huge mechanism called the state. He can be ignored but cannot be forgotten, and there are occasions when he becomes a powerful lever of that mechanism. Leaving aside for a moment as to how much happens to be his own share of national wealth, the fact remains that all this wealth is being produced in his name. A sense of dignity, of participation in a common endeavour, of common national goals and destiny has accrued to Indians as a result of the inauguration of democracy.

There is the other side of the coin. Expectations have unduly mounted, too much unbridled, irresponsible thought has made national consensus difficult, and the machinery to control unrest and tensions has become more and more unmanageable. Inasmuch as achievements do not tally with hopes, doubts have begun to form about the entire apparatus of government as well as the inspiration behind it. Democracy has created in

7 Statesman, April 26, 1966.
India a free society which is susceptible to foreign ideological onslaughts, so characteristic of the post-war period.

In the fourth general election held in February, 1967 as many as 20 main parties fielded candidates, in addition to numerous nondescript parties. Besides, there were "independents", the typical product of Indian society, whose votes for the State Assemblies amounted to 21 million, next only to 56 million, the highest, which were polled by the Indian National Congress. Among them the most conspicuous thing was their difference in make-up, outlook and demands. If national consensus in the midst of heterogeneous viewpoints and methods is the pre-requisite of democracy, then the conglomeration of parties and individuals in the election showed that it did not exist; rather there was evidence of a fragmented society which mirrored political, economic, religious, feudal and regional differentiations.

One is therefore left wondering whether democracy has only accentuated India's age-long disunities or whether it has thrust India's diversity into the open in a bold attempt to discover a focus.

It is not surprising that India's democracy is sometimes criticized from two entirely opposing standpoints. From one standpoint, it "could only become a working democracy in the Western sense after a revolution which strikes at the very roots of Indian society and Indian tradition." In the West, the individual is not born into a tightly organized group which demands his loyalty in dealing with the rest of the community. In India, such groups—castes and sub-castes—dominate social life. Under modern impact the old castes of ritual and status have given place to stronger castes of great economic and political power, which make their influence felt over much greater areas today than in the past.

We take the case of a highly caste-ridden State, Bihar, in 1966. Among the castes that dominated the scene Bhumihars and Rajputs came first, interspersed with Brahmans and Kayasthas, backward castes like Yadavas, the Muslim castes, and dozens of sub-castes which in turn had their own gradations. Of the four groups in the State Congress controlled by Ministers, each

consisted of men mostly of the same caste as the Minister. Elections to the university senates were fought on caste lines, and caste could have been the only reason why a student sometimes got his first position in a university examination. Between 1962 and 1964, serious caste riots took place among students. The administration was crippled by the virus of caste. All political parties before selecting a candidate for election took into account the caste composition of the constituency, and caste was an important feature of the manning of the party leadership, including that of the communist party.

But casteism could not by itself provide all the support a candidate wanted for himself. The Karan and Brahman castes of Orissa, for instance, however powerful, constituted at the time of the second election only 8 per cent of the population; they provided leaders with only a fraction of supporters and by virtue of their economic power were gradually becoming more like classes than castes. Caste system in Orissa, quite substantially a product of regional disparities between the developed coast-lands and undeveloped hill tracts, has been under transformation through economic development.

As if to defy social scientists addicted to orthodox modes of survey, in 1967, after the election, the scene changes in Bihar. A coalition government of Jana Sangh, socialists and communists replaces the Congress Government. The new Ministry does not have caste composition; and its common programme is chalked out from the point of view of what would appeal to the people as a whole—improvement in irrigation, relief of drought-stricken people, grant of dearness allowance, remission of land rent etc. In the election, the people had shown their power by bringing to an end the 20-year undisputed rule of the Congress and brought about non-Congress Governments in 8 States.

So, the people count.

This provides the key to the second viewpoint. Democracy is viewed not as if it is unsuitable for Indian conditions but that it has not developed enough, with its true spirit, form, and range. The criticism is that Western democracy never lived up to its proclaimed ideals, which, in the last resort, means that people should govern themselves. In India, as in the West, the people are not governing themselves, they are only governing by consent.
"The Orissa voter", says a research scholar, "has little sense of participating in government: the electoral mechanism does not appear to him to be a mechanism of consultation. The Government remains as remote and exterior as it has always been.\(^9\)

Indian critics have been even more severe. What passes for democracy is the enthronement of an "oligarchy of political operators" at the apex of a "wooden administrative system"; a sense of authority and privilege rather than a sense of duty to represent the people has crept among the delegates to local bodies, State legislatures and Parliament.\(^10\)

In this connection one must recall Article 40 of the Constitution, apparently innocuous, by which the "state shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government." Actually a good deal of debate lay behind this Article, involving Gandhian thought itself. "That state shall be the best which is governed the least", Gandhi had said. "Society based on non-violence can only exist of groups settled in villages in which voluntary co-operation is the condition of dignified and peaceful co-existence." A Gandhian Constitution for Free India was in fact published in 1946 by one of his devotees, but its main contribution to the Constitution was only the insertion of the above provision about village panchayats.

In 1957 was published Report of the Team for the Study of Community Projects and National Extension Service (the "Balvantray Report") which, while indicating the formalistic approach to community development, recommended the institution of local representative bodies who should be made responsible for economic and social uplift. There would be panchayats in each village grouped together in circles which would send one representative each to Panchayat Samiti, whose presidents would form Zila Parishad at the district level. Village panchayats as well as the upper bodies have now been constituted in all the States, but they are not "non-violent" in the Gandhian sense: they are rent by factions, captured by political parties, dominated by the official element, and, with some exceptions, have not been a success.

Political idealists are unhappy over this development but are

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\(^9\) Politics and Society in India, p. 112.

\(^10\) Link, August 15, 1966.
not dismayed. They still press for the establishment of true democracy at the grass roots. "If stability has to be imparted to our democracy," says Jayaprakash, "the base must be broadened and the top layers architectured into the basic structure." As against this, Indian democracy "is like an inverted pyramid that stands on its apex." This cannot be durable. Instead of having a mass of disparate individual voters at the bottom—the sand heap—they should join up at various levels, with the fullest opportunity to manage their affairs at that level. The centre would have only as much of power as required to discharge its central functions, and the rest of the power should belong to the lower organs. Such an arrangement would be more cohesive and stronger than the one prevailing now, in which the Centre appropriates to itself most of the authority but is incompetent to exercise it. From a purely military angle, it would result in the establishment of dispersed pockets of power all over the country, which could be a factor in guarding national security even after the regular armed forces collapse.

Such a political embodiment of the Gandhian conception of state depends upon many presumptions. The electorate should be educated, the political parties should not poke their nose into the field of panchayats, and representatives and specialist staff of the State and Central Governments should be subordinated to the local bodies. There has to be an appropriate zest on the part of the people in the processes of management in addition to the processes of production, which are by themselves exhausting enough. Above all, there has to be a proper answer to the query whether democracy is at all suited to the Indian genius. These and many other presumptions have yet to be confirmed.

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Four features of the Constitution are vital for India’s strength, unity and integrity. One of them relates to the office and position of the President, in whom all executive authority resides; this authority must be such as to prevail over all the land all the time. Another relates to the links which bind the Union and the States. The third concerns language, which is a key to national unity. The fourth is the provision on military affairs, bearing on the security of the state.

Presidentship, Centre-State relations, language, and military affairs have assumed special importance today in view of the end of one-party rule in 1967. The Indian National Congress had led the nationalist movement in the British times; its leaders dominated the Constituent Assembly; and all three elections, ending with the one in 1962, returned Congress Governments at the Centre and in the States. A good deal of the success of this party was due to the revolutionary aura worn by it from the past, the personality of Jawaharlal Nehru, the accumulated prestige and power of office, and its considerable financial resources. Besides, two special factors helped bring about unity in the design of governance. The official and the party machinery at the Centre
worked together with little evidence of discords; the State Chief Ministers, practically all Congressmen with numerous old associations, personal ties and common memories, were susceptible to central influence and mutual sentimental regard.

These factors and situations do not hold good after the fourth election. The Congress is no longer a united body, eroded countrywide by the rise of the familiar political specimen called "the dissident"; even the contest for Prime Ministership was avoided with the greatest difficulty. There are Congress Governments in only half the States, while at the Centre its majority is drastically reduced and precariously held. Coalition Government is the pattern forced upon many States, and might well become the pattern for the Centre.

There can now develop conflicts between region and region, idea and idea, personality and personality; hence the Constitution and in particular the provisions binding the various sections of the country together have become of crucial importance.

1. THE PRESIDENTSHIP

Once upon a time there was a suggestion that India should have a Presidential form of democracy after the American model. The advantages were that the President would enjoy stability of office which, thanks to the vagaries of party politics, a Prime Minister in the cabinet form of government does not enjoy, and that he would be able to function with concentrated authority and also take quick decisions. "I recall", said Lord Attlee, a former British Prime Minister, "suggesting to Indians when I was on the Simon Commission (1928) that perhaps they would find the American Presidential system more suited to their conditions, but they rejected it with great emphasis. I had the feeling they thought I was offering them margarine instead of butter." ¹ Twenty years later a similar suggestion came in the Constituent Assembly also but was rejected. Under the British, Indians had grown accustomed to a head of State only in a cabinet form of government; its merits vis-a-vis the Presidency of the American type were hardly scrutinized.

But apart from this the position, status and role of the President is of great psychological value to Indians, accustomed as they are to the embodiment of authority in a person. Because he is elected by Parliament and the State legislatures, together forming an electoral college, he represents the nation, in contrast to the Prime Minister who represents only a party in Parliament. He is the one elected official who, having kept away from the rough and tumble of electioneering, gathers little political dust about his person. Being the head of the Union who also appoints heads of the States reporting to him directly, he enjoys a unique pivotal position. In him are focused the unity and solidarity of the nation more than in any other single individual. If he has also enough power and wisdom, he can greatly contribute to the stability of government and unity of the country.

But constitutional pundits do not agree over the powers conferred upon the President in the Constitution. By Article 53(1), the executive power of the Union is vested in the President, to be exercised either directly or through officers under him in accordance with the Constitution. By Article 74(1) there is to be a Prime Minister with his Council of Ministers “to aid and advise the President in the exercise of his functions.” The point is whether the President is bound to accept this advice under all circumstances.

There is nothing specifically prescribed in the Constitution to say that he should. But it is held that a convention ought to be established by which the advice is invariably accepted, that like the British Crown, he should only have “the right to be consulted, the right to encourage and the right to warn.” This, it is said, would be in the spirit of democracy, for after all the President is not elected by the people on the basis of policy nor is he responsible to any democratic organ of the Constitution; the Prime Minister is. Behind the flag of discretion and independent judgment, some fear that a President could cut across the broad concept of the sovereignty of Parliament, if not establish a dictatorship. Instead of generating harmony, he could generate friction at the heart of national life.

On the other hand, it is also held that the Indian President is not like the British Crown. By his oath (Article 60) he must “preserve, protect and defend the Constitution.” Unlike the Bri-
tish Crown, who does no wrong, the Indian President can be impeached for violating the Constitution; and he cannot ask for exoneration on the plea that he acted on the advice of his Ministers. Article 123 authorizes the President to promulgate ordinance when he "is satisfied that circumstances exist", while by Article 352 he can proclaim emergency if he "is satisfied that a grave emergency exists." In these Articles no mention is made of the Council of Ministers. The President has special responsibility in regard to certain federal appointments, the holders of which should function free from interference from the executive; these include judges of the Supreme Court and High Courts, the Election Commission, the Controller and Auditor General, members of the Union Public Service Commission, and the State Governors. When there is an impending constitutional breakdown, when there is threat to national security, when the executive is unable to meet internal disruption successfully, the President, it is held, can function on his own initiative and in his discretion.

It appears from the above two viewpoints that despite the meticulous precision with which the Constitution is drafted, there is a scope for elasticity in Presidential functions. His office resembles perhaps a mine known to have rich ore, which however is still untapped. It would be a point to consider whether, in this formative stage when democracy in India is far from mature, it is advisable to bind him to any specific convention which is borrowed from abroad and is not rooted in India's own experience.

Today the chief executive of the state should be one who is knowledgeable, tactful, vigilant and capable of an objectivity which accrues to him by virtue of his position above politics. He has next to no instruments of his own which will enable him to become a dictator; all that he can do in the last resort is to appeal to Parliament or the nation, in which case he may strengthen rather than weaken democracy. But knowing how lethargic, indecisive, faction-ridden a government based on single party or multiple parties can be, he can keep his Ministers on their toes. From his high pedestal, he ought to be the first to see the signals of danger and ensure that these are heeded at once. And if he cannot use his initiative in certain grave situations, may it not be that a Presidential type of democracy on the American model would after all be more suitable to India?
Here we must keep in view the foundation of the Constitution and the atmosphere in which it was drawn.

The Constitution derives from the Government of India Act of 1935, under which the Provinces, even though given certain powers, were subordinated to the Centre. Framers of the Constitution knew how divisive had been the regional forces in India and also saw disintegration and disorder in various parts of the world. They had enjoyed the experience of a unified rule and common revolt. "However much you may deny power to the Centre," said Dr. Ambedkar, an architect of the Constitution, "it is difficult to prevent the Centre from being strong." If to "strong" were added "pervasive", that would sum up the intention of the constitution-makers.

At the same time, to let units of such large geographical dimensions as the Provinces have only fictional authority as under the British was not only anti-democratic but impractical. The ideal was to combine a powerful Centre with autonomy of the States. No established constitutional description would really fit this arrangement. It was not a federation because the units had no independence which they were surrendering to the Centre; it was not a unitary State, because the units were to be given autonomy. The Constitution calls it the "Union of States," and aptly enough.

The Union-State nexus provided for in the Constitution may now be viewed under legislative head (Articles 245-255), administrative head (Articles 256-263), and financial head (Articles 264-293). We must remember that each State is headed by a Governor, who is appointed by the President, who serves as an agent of the Union, and who cannot be removed by the State.

Supremacy of the Union

While the Union and the States have been allocated their subjects, many provisions have been made to bring about or ensure the supremacy of the Union. The residuary powers are vested in the Centre (Art. 248). Where a law passed by the State legislature is repugnant to a statute of Parliament, the latter shall prevail (Art. 256); by the same Article, the States are to ensure
compliance with the laws made by Parliament. With the agreement of the Rajya Sabha, a subject in the State list could be transferred to the Union List (Art. 249). And when a Proclamation of Emergency is in operation, the Union Parliament can legislate on a State subject (Art. 250).

In the administrative sphere, the State must ensure compliance with laws made by Parliament, and for this purpose the Centre can give the States appropriate directions (Art. 256). The Centre can use the States as its administrative agent (Art. 258). The Centre can also exercise administrative control through All-India Services occupying strategic posts, the Centre-aided plans under implementation in the States, and its financial grants. Voluntary co-operation between the Union and the States is also provided for, under which administrative matters of one could be transferred to the other by mutual consent. And the Central Government can establish a council for inter-State co-ordination.

Financially, the principal sources of revenue of the Union and the States have been prescribed in the Constitution; much the larger share goes to the Union. Parliament is required to provide grants-in-aid to such States as require assistance, and different sums may be fixed for different States (Art. 275). Under this Article, the allocation is done on the recommendation of a statutory body, the Finance Commission, but under Article 282, the Union can make to the States "any grants for any public purpose", which implies a very large measure of central discretion.

In normal times, there is always visible an impressive array of weapons in the armoury of the Union. It can veto the bills of a State and suspend its Constitution. It has the exclusive right to raise, control and employ the armed forces. It has the great and exclusive privilege and prestige of contacts with foreign powers. The Union list of subjects opens a vast and highly lucrative field for central enterprise, so that by promoting industry and controlling commerce, it exercises enormous pressure on the constituent units. It can make financial grants. It controls practically all heavy industry, and the States look for a share of its location and other advantages; it holds the lure of opening new railway lines and transport routes and undertaking new projects, and it tempts the more ambitious leaders in the States with Ministerial posts at the Centre where lie the springs of power. The Chinese
and Pakistani attacks underlined how helpless units could be without Union assistance.

Dependence of the Union

On the other hand, the Centre can become helpless and ineffective without the co-operation of the States. Whereas it has the power, the States have the people. The people are an instrument readily available for use. The people can be used even against the Centre by members of a State Assembly which has made up its mind to run counter to the Centre. Apart from its very small number of agents, the Union Government has no administrative machinery of its own operating in the States; therefore for its projects and plans it must depend upon the supply of that machinery by the State Governments. Its grants of hundreds of millions of rupees can go waste if the State authorities do not co-operate.

It is true that the armed forces fall within the Union jurisdiction, but they cannot be built without State assistance. The Union can get the weapons required from abroad or from its ordnance factories, but its recruiting agents cannot get the manpower without assistance from the district collector, the village chief or the schoolmaster. Without co-operation from the States in the form of labour, land, electric power, raw material etc. the great infrastructure of defence cannot be constructed. No military station can run without ample and constant facilities from State authorities. Co-operation of the States is vital and indispensable in order to operate the Central Border Forces, a quasi-military body under civilian control for the peace-time defence of the frontiers, and to wage a war if frontiers are breached.

In actual practice, the Centre finds that where the State Government is openly hostile, it can do very little in respect of the law and order situation prevailing in the State, unless it uses the armed forces: this happened over the sensitive sector of Naxalbari in West Bengal, an area close to the Tibetan border, where 'left' communists, whose representatives were in the West Bengal Government, incited and connived at revolt among the peasants. Central food policy has not been fully implemented for lack of adequate procurement of grains in the States. Community deve-
Development has had a stunted growth while many land reforms have not been carried out. In 1967, some States adopted fiscal measures which cut across their financial resources and indirectly hampered the execution of plans.

**Dissent of the States**

Thus there can be, and are, legitimate complaints from the Centre. But it is from the States that criticism and complaints have become more pronounced; some States have even questioned a few constitutional provisions affecting them. The Constitution makes Parliament competent to amend all its Articles (except, as ruled by the Supreme Court, those on fundamental rights). This it can do by a simple or special majority, without consulting the States except in a few, small number of cases. The States allege that by virtue of its overwhelming majority, the Congress has in the past carried out a large number of amendments in an arbitrary manner. They criticize the continuance of emergency, inaugurated in 1962 and ended only in 1968, which has enabled abuse of the Defence of India Act and Rules. They resent the uneven distribution of seats in the Rajya Sabha as between the different States. And they are unhappy with a Parliament which has the right to enact a measure such as the Commission of Enquiry Act, 1952; this was invoked in 1963 to enquire into the conduct of a Chief Minister and could be invoked again, to the severe detriment of the autonomy of the States.

The States note that the Governor can be a powerful agent of the Centre; therefore his character and manner of appointment are important. Normally he is appointed by the President on the advice of the Prime Minister; in that case the character and complexion of the party to which the Prime Minister belongs become significant. And if the President is also a nominee of the ruling party at the Centre, the entire complex of central power is enveloped in suspicion and anxiety. The States are aware that whereas the Supreme Court can adjudicate between the Union and the States over their constitutional rights and legislative powers, it is not competent to enquire into the exercise of powers reserved for the President. Understandably, there was a contest for the office of the President in 1967, and, after the Gov-
ernments were formed, some State Governments insisted that Governors be appointed with their consent.

Finances have given rise to dissent among many States. The Constitution provides the sources of revenue in such a way that the share allocated to the Centre is very large and expanding. This includes customs duties, excise duties except on a few articles, corporation tax, a share of income-tax and a right to impose a surcharge for its own purpose on income-tax and some other taxes collected by the States. While revenues from the customs duties have fluctuated, corporation tax has made impressive gains thanks to industrialization, and the excise duty has increased so much that it has now become the dominant element of Central finance, accounting for half the revenue receipts.

The main sources of revenue of the States are land revenue, excise duty on alcoholic preparations, sales tax, estates duty and a share of income-tax. These taxes are inelastic and the yield from some of these has even got eroded. Though land revenue was at one time the backbone of Indian finance, it is no longer of any significance; the time-old basis of determining the levy has been given up. Excise duty on alcoholic preparations has not been available to the States, who have on the other hand been saddled with the expense of enforcing prohibition. Sales tax is the only elastic source and its rates have to be revised from time to time; but there is a limit beyond which it cannot be increased.

The Reserve Bank of India bulletin of May, 1966 described the financial condition of the States as follows:

Over the three Plan periods, both the aggregate receipts and expenditure of the States have risen, the rise in the latter being much faster. Aggregate overall deficits have risen, therefore, sharply from one Plan to the next, despite increasing assistance from the Central Government which indicates that the efforts at resource mobilization by the States themselves were not adequate in relation to requirements of planned development.

While the States might not have mobilized their resources, they have, as a matter of fact and by virtue of the Constitution, never been self-sufficient financially and have always depended on Central assistance for their viability. Prudently enough, the Consti-
tuent Assembly provided a machinery in the shape of the Finance Commission, which is independent of Government and determines the principles and the measure of assistance to the States. The Commission has functioned but with all its recommended assistance it has been unable to cover the budgetary deficits of all the States.

Besides, its functions have been greatly compromised by the establishment of the Planning Commission. The Planning Commission makes plans in terms of the finances of the States and their needs of social and economic development, and determines the quantum of total aid to be given. The Finance Commission is thus principally concerned with the non-Plan requirements of the States, recommending grants-in-aid under Article 275. But the Planning Commission makes recommendations for finances on the basis of Article 282. Under this Article, which embodies only a permissive provision to meet contingencies, massive grants have been made to the States, sometimes double the assistance provided by the Finance Commission. In the last resort, these grants are discretionary and not statutory and could be used so as to make the States appear as permanent beggars.

Is the Constitution defective? Have we entered an era of dissent of the units against the Centre to be encountered regardless of the Constitution? Are the States demanding autonomy as a part of the democratic process or are they unleasing fissiparous forces? We do not know the answers to these questions yet.

Presently, the Union has the authority it needs to prevail over the units, has a major portion of the resources which go to the making of power, and can concentrate national effort; this can make the country strong. On their part, the States are ambitious and seek autonomy as much as they can, depending upon local strength, complexion of political parties and differential of Union and States leadership; this may make the country democratic of a sort, but not necessarily strong.

3. LANGUAGE

A language riot in India is a possibility only next in importance to a communal riot. While religion motivated division of the Indian sub-continent, language brought about a sub-division
of the new India into its States, with passion and excitement which were as surprising as they were intense; for few had imagined that language and emotionalism were such intimate bedfellows.

After Macaulay wrote his famous minute in 1835, English was introduced as a compulsory medium of instruction in most of the schools. When the British left 112 years later it was the language of administration, of national intercourse and international contacts, and of scientific learning. But it has had two disadvantages: it is not the language of the land, and it does not fit into the schemes of freedom from foreign influence, of national pride and patriotism, and of self-sufficiency; and it is spoken by less than 2 per cent of the population.

In a country where languages are prolific, there should normally have been no difficulty in getting a substitute. By a process of sifting, however, only 15 of them have deserved the status of "national" languages; they are rich, spoken by a substantial number of people, are ancient, some even claiming descent from 5,000 years ago. Out of these, Hindi was selected for the highest status after some of the longest and most controversial debates in the Constituent Assembly. The step was important, as it was difficult. Four chapters of the Constitution have been devoted to it, with a generous spray of those three legal terms—"provided", "subject to", "notwithstanding"—which are the hall-mark of controversies and compromises. Even then the language problem is not settled once for all and the linguistic fever has not disappeared.

Article 343 provides that "the official language of the Union shall be Hindi in Devnagri script." This means that the Union will employ Hindi in the Union Offices and in its communication with the States. On their part the States have been allowed to have their respective regional tongues as the official language, any one of the national languages mentioned in the Constitution, if

2 The 1951 census listed 845 languages or dialects, but most of them are spoken by a very small minority of people. The Constitution of India in its Eighth Schedule as amended recognizes 15 languages as follows: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu and Urdu. On their inter-relationship see The Gazetteer of India, 1965, p. 372.
they want, but in their communication with other States they must use Hindi unless mutually decided otherwise. Since only 47 per cent of India was Hindi-speaking when the constitution was framed, and since even this percentage did not speak the same Hindi everywhere, a certain period of time was necessary for it to grow and be known and learnt widely; besides Hindi did not have all the necessary administrative and technical terms which therefore had to be turned out and developed.

So, it was decided that till 1965 English would continue to be the official language, after which Hindi would take over, but here an exception was inserted, to the effect that English could still continue if the President so decided. Two language commissions have since been set up to assess the progress of Hindi, to restrict the use of English and to determine to what extent Hindi could take over after 1965. But each one of them has been confronted with a barrage of dissents and protests.

In 1963, Parliament passed the Official Language Act, which seemed to close one chapter of the language debate and open another. It laid down that in accordance with Article 343 of the Constitution Hindi would become the official language after 1965 but English “may” continue; in 1975 the position would be reviewed by a Parliamentary Committee. In 1965 again there were, true to style, demonstrations, riots, burnings and killings, and resignations from legislatures, as a protest against any switch to Hindi at the expense of English. Even an amendment in 1968, consolidating the position of English, brought no peace.

The Hindi controversy is thus apparently shelved up till 1975. Does this mean that the generation which has fought the battles of language would by then have made an exit from the political scene, and there would be another generation to deal with an old unsettled issue?

A decade hence the vocabulary and richness of Hindi and its impact upon the people would assume decisive importance; the psychological factor will also be crucial. Scholars, administrators, and politicians must therefore begin to build Hindi up; for it has to be taught, learnt and imbibed by young men and women today who will be handling the country’s affairs tomorrow.

It is in this light that we must discern why the movement for integration launched in the country places so much emphasis on
education and the medium of instruction. But there have been few clear-cut decisions. Education was the theme of the Committee on Emotional Integration, which we have mentioned. This committee could only reiterate the problem, rehash old themes, present a scroll of recommendations made many a time before by numerous committees but not implemented. There are in its report the old queries of how many languages a child should learn, at what stage he should learn what language, what should be the language of the universities for higher learning, how and where English should fit in—English, the language of the 2 per cent, and yet a very important 2 per cent, the indispensable English which has bound the country together as no indigenous language has ever done and without which India would be shut out from the outside world.

There is no parallel to the Indian problem. Russia, Switzerland and Yugoslavia have had to face the question of plurality of languages but they have not been beset with the multiplicity of scripts as India has. The fifteen national languages have seven different scripts, and the remaining eight are dissimilar though they have common roots. There has been a suggestion that at least for the interim period the Roman script instead of Devnagri script may be used for Hindi.

Roman is the most commonly used script and the most practical in the world. Turkey gave up the Arabic script for Roman; some republics of the USSR adopted it for 20 years before changing over to the Cyrillic which is now the national script of Russia; Malaysia, the Philippines, Indonesia, Vietnam and now China have adopted it. But such an innovation will be a major national enterprise.

One can therefore understand why administrators, scientists, engineers, industrialists and businessmen, vice-chancellors of universities and scholars and intellectuals all over the country wish not only for an indefinite continuation of English, but its proper learning and advancement. This wish is reinforced by widespread political sentiment.

A South Indian MP told the Lok Sabha: "The non-Hindi speaking people consider that both English and Hindi are foreign languages. Hindi was not the language in which Lord Buddha spoke nor Ashoka administered his empire. They are content
with the thought and memory that it is English that brought them into contact and understanding conversation with the mighty men of our times, like Swami Vivekananda, Rabindranath Tagore, Mrs. Annie Besant and Mahatma Gandhi; that it is English that opened to us the gateway to knowledge and to technical and scientific advancement; that any tinkering with it would take our country back to the dark Middle ages.\(^3\)

If, said another MP, Parliament held its session not in Delhi but in Calcutta or Madras and talked about Hindi as the common language, a million men would raid it in protest. "Hindi imperialism" has been condemned at times and parts of the Constitution dealing with Hindi have been sought to be burnt in public. "The choice before us," said an anti-Hindi anarchist, "is not between English and Hindi but between the unity of the country and the appeasement of the Hindi-speaking majority. Needless to say appeasement would lead to further fragmentation of the land."

And from all this it appears that the question of a common language would infringe upon national unity powerfully in the future, as it has done in the past.

4. MILITARY AFFAIRS

Defence of India occurs in the Union list of subjects in the Seventh Schedule of the Constitution. There are 7 entries\(^4\) relating to it (out of a total of 97): national security, the armed forces, arms and ammunition, defence works, defence industry, delimitation of cantonment areas, and war and peace. Today, no State can maintain a regular force or militia under its control; its connection with national defence is indirect, wholly through the Union. This has two-fold importance. The Centre is in a unique position to exercise supremacy over the States with the help of the armed forces; and the armed forces owe direct allegiance only to the Centre and not to the States. In the past, it will be remembered, the existence of a large number of armies maintained by regional rulers was one of the main causes of disruption of national unity.

\(^3\) Swarajya, May 4, 1963.
\(^4\) 1, 2, 3, 4, 5, 7, 15.
Amidst all the heat and dissent between the Union and the States, no State has so far questioned the propriety of the above provision or demanded a military force of its own.

Having been incorporated in the Union list, defence becomes the exclusive prerogative of Parliament, that is, in accordance with Article 79, the President, the Lok Sabha and the Rajya Sabha. In other words, it is the joint responsibility of the executive and the legislative wings of the paramount body. The Constitution then goes further and defines the manner in which this responsibility is to be translated into action, by stating in Article 53(2) that “the supreme command of the Defence Forces of the Union shall be vested in the President and the exercise thereof shall be regulated by law.”

The Constitution makes no further elaboration of this point. That being so, two aspects of the functioning of Parliament in relation to defence require to be watched, as to what Parliament does and as to what the President does.

Theoretically, Parliament could make any law within the Constitution, which the executive would be required to obey while exercising its command; it could even authorize the President to become a military dictator. Should that happen, democracy may end and Parliament may stultify itself. Such a law, therefore, may not be passed. At the same time it must accept compulsions of enacting only such measures which conform to military expediency, prudence and well-tried, established practice. This is because compared to other national tasks, defence has three unique features: it needs secrecy, is highly specialized and involves delicate questions of discipline and morale. Very few individuals even in the executive could be trusted with the complete knowledge of these matters, which could certainly never be taken up openly in the two Houses of Parliament.

Parliament has therefore got to impose certain restrictions upon itself. Of the three aspects of defence—policy, strategy, operations—it could be concerned only with policy, very seldom with strategy, never with operations. Or, in another language, it could be concerned with control, not with direction, never with command. Unlike the Indian Constitution, the American Constitution does make a broad division of responsibility on these lines between the American Congress and the American President.
Three principal methods are in vogue by which Parliament seeks to influence policy and exercise control over defence. One is by the actual enactment of laws establishing the armed forces; by the Army Act, the Navy Act and the Air Force Act three separate Services have been constituted, on the model left behind by the British. The second method is through the Parliamentary Estimates Committees, which examine the role and functioning of the defence bodies and make recommendations; mostly their task is of a post-mortem nature. The third form of control is through the sanction of the defence budget from year to year. A Parliamentary Defence Consultative Committee also exists but has not been particularly effective.

It is during the budget session no doubt that Parliament is most active over defence, providing indeed the only forum in the country where military affairs are discussed informatively and abundantly, and where one gets the best commentary on the state of national security. Apart from discussion members can move "cut motions" on defence demands, which is a highly vocal system of emphasizing needs and pointing out failures. In Parliament, members have been demanding the strengthening of defence, fair deal to Service personnel and removal of incompetent Defence Ministers; on occasions they have also been thrashing the Government for its sins of omission and commission.

All this does influence the executive, but so far the influence has been marginal, which does not speak well of the parliamentary form of Government. During the first two decades of Independence, India's military power was at a low ebb, and this despite exhortations of the members of Parliament. There were many reasons for this—the executive was inexperienced, did not have adequate conception of power relations, and was pacifist in outlook. Politically, it was so powerful, with the help of an overwhelming majority, that it took the entire Parliament in its stride. The legislatures created no adequate apparatus to carry out their duties in regard to military affairs, and political parties established no defence cells inside or outside Parliament.

This is the first and the more important of the two aspects to be watched. The second is in respect of the President.

The President is the Supreme Commander of the armed forces. As such he may perform three kinds of functions. He can take
command of the forces in the field and deploy and direct armies, whether within or outside the country. There are no signs whatever of the President undertaking a responsibility of this nature. He can participate and lead defence deliberations in the Indian High Command, particularly at the level of the Cabinet. So far this has hardly ever happened. He can be a leading light in the development of defence ideas and policies, like Mao Tse-tung who never commanded armies but was a principal architect of Chinese military tactics and strategy. This also is not happening. On the other hand, the Supreme Commander is increasingly out of touch with his command, and the tendency is to reduce his position to a mere constitutional fiction.

There are so many fictions in democracy already that it would be prudent not to go on adding to them as far as possible. From his office, the President could certainly bring to bear a fresh, objective look on military affairs and become a factor of morale for Service personnel who are always prone to pin loyalty on an individual rather than a group.

The Constitution imposes restrictions on the fundamental rights of defence personnel; by Article 33 the restrictions are to be determined by Parliament. The Army, Naval and Air Force Acts define these restrictions which are three: Servicemen cannot be members of a trade union, cannot attend a political meeting, and cannot communicate with the press without permission. As a corollary to these bans, no political propaganda is permitted within the armed forces. From this it can be presumed that the Indian Defence Services are non-political, something which is often quoted as a laurel in their cap.

Contrasts with other countries will strike immediately. In the United States the Army, Navy and Air Force are all vocal, more or less, through numerous societies and associations connected with the Services; even when not official these bodies exercise considerable influence in the two houses of the legislature and departments of the executive. Besides, the American Congress has the right to call, and it does, individuals from the armed forces for testimony while investigating military problems; many a soldier has used this as an opportunity to let off steam. Russia and China have gone a step further, for under their constitutions the armed forces have a right to send their deputies to the highest
law-making bodies; Russian and Chinese soldiers can therefore claim that theirs are the most democratic countries of all. It need hardly be said that far from being banned, politics is by the Russian and Chinese laws injected into the military system.

There is no doubt that India owes a good deal to the insulation of the armed forces from politics, thus retaining a large measure of its free democracy under some of the most trying conditions. But it is wrong to conclude that the armed forces, which form one of the more educated sectors of Indian society, have no political opinions. It will also be wrong to suppose that the rigid restrictions on their fundamental rights are accepted without demur. It would be advisable to let them have a free say sometime, somewhere. It will be good for the Services, or else they would remain perpetually behind an iron curtain rung down by a secretive executive; and it will also be good for democracy.

An Omission

There is a word to be said about what appears to be an omission. Nowhere does the Constitution prescribe clearly and categorically national security as an objective of the state. That such an objective is understood is true, but when a hundred thousand words are spilled for the sake of emphasis and precision, when even the setting up of a panchayat or the remuneration of a functionary is fit enough to claim a specific mention, the defence of the country could also receive an emphatic reference even at the risk of repetition.

Not that this particular aim was never considered. On 13 December, 1946, Jawaharlal Nehru moved the famous objectives resolution in the Constituent Assembly, and Clause (7) of this resolution said that the constitution was to be framed "whereby shall be maintained the integrity of the territory of the Republic and its sovereign rights on land, sea and air." This was the nearest approach to an assurance about national security. How this was to be translated was left vague, but one could see that military power would be an element of it. But when it came to the Preamble or the objectives of state policy incorporated in the Constitution, even an indirect reference to this particular objective was omitted.
Compare this with the Preamble to the American Constitution which states: "We, the people of the United States, in order to form a more perfect union, establish justice, ensure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this constitution of the United States of America."

Americans found two centuries ago that "domestic tranquillity" and "common defence" were necessary in constitution-building. These were also necessary when our own Constitution was built. For behind it lay the ruins of a world war which had toppled empires and rubbed off and re-drawn frontiers, and which taught that the integrity of a state could not be taken for granted and that something more was needed for this purpose than Justice, Liberty, Equality and Fraternity, to quote from the Preamble of our Constitution. Seven months before the adoption of this Constitution the North Atlantic Treaty had been signed which also indicated how pressing and formidable the problems of national security had become for which nations were grouping.

When in 1962 defeat came at the hands of the Chinese it was felt that something had slipped somewhere: the executive had bungled badly in defence and had gone its own way merrily watched by neither the people nor Parliament. Having set up a Parliament, a President and a Council of Ministers, if the Constitution still needs an Auditor General to keep watch over money and a Chief Justice to keep watch over law, perhaps some similar institution is also needed to keep watch over the problems of security. Some vacuum in the Constitution in regard to defence has all along the line caused voids in thinking, planning and functioning in Indian life.

**Democracy and National Security**

How has democracy fared in India in relation to national security? Here two periods may be discerned, the years before and the years after the Chinese attack in 1962.

The pre-1962 period witnessed India declining steeply as a military power. There was little geopolitical sense on the part of leaders. The reconstruction and renovation of the armed forces,
commenced after the partition, was not only unrelated to the threats to national security but lackadaisical and tardy. Defence production, ill-organized and wasteful, was confined to the manufacture of only elementary weapons. Defence was hardly linked to the total development of the country, and there was little effort to harness the great intangible factors of population and geography which make for national strength.

When the Chinese struck, a proclamation was issued under Article 352 of the Constitution. By this Article, "If the President is satisfied that a grave emergency exists whereby the security of India or any part of the territory thereof is threatened, whether by war or external aggression or internal disturbance, he may by proclamation make declaration to that effect." Simultaneously the Defence of India Act and Rules which was operative during World War II was resurrected. Applicable to the whole of India, it was "for securing the defence of India and civil defence, the public safety, the maintenance of public order, the efficient conduct of military operations and for maintaining supplies and services essential to the life of the community."

The Act contained a list of 48 items about which the Government could make the laws it wanted, and the items covered the safety of defence personnel and equipment, security of vital points, trade and industry, communications and movements, property and publications. Special tribunals could be appointed to try cases under the Act, which could levy punishment to the extent of death penalty. A notable casualty was of course the fundamental rights granted under Article 19 which give the famous seven freedoms. "Here is one right," a member of the Constituent Assembly had said at the time of drafting the document, "more precious than perhaps any other because it makes other rights workable, real, concrete and actually experienceable..."

But of course a war could not be fought on the principles of the Magna Charta.

To all appearance the Defence of India Act and Rules did not disturb the democratic processes of the country. Elections to the legislatures were stopped for a while but were resumed. Parliament and State Assemblies functioned. Administration could be tailored to meet the new situation. It was found that authority could be concentrated or dispersed as desired. The judiciary
bristled with life, and on numerous occasions the Supreme Court was approached for judgement as to whether constitutional properties were being observed.

An interesting case occurred in Uttar Pradesh in March, 1964 involving a conflict between the State legislature and the State High Court. The legislature directed that a political worker be committed to prison for contempt of the House. On a petition filed by the worker, the High Court granted him interim bail and issued notice to the legislature. The legislature passed a resolution stating that under Article 194(3) of the Constitution the legislature's privilege was absolute and no external authority could question it, and that therefore the judges had committed a contempt of the House and should be produced before the House. In turn the judges petitioned the High Court which passed an order restraining the legislature from arresting the judges. The case was submitted to the President, who referred it to the Supreme Court, which gave the opinion that it was the Constitution, the law of the land, which was overriding, and not the legislature; and legislative acts were subject to judicial interpretation and authority.

Thus while the emergency was on, and, incidentally, March, 1964 also witnessed grave unrest throughout the country arising out of food shortages, India debated a fundamental point of democracy embodied in the Constitution—the rightful privileges of the legislature, the executive and the judiciary.

This aspect of the forms and formalities of democracy during emergency showed promise, but there were other aspects. Because the enemy had penetrated only a small sector of the country and gone back it could not be said that the country's political machinery was fully tested. Indeed, so short-lived was the impact of attack that within six months of it voices were raised against the continuation of 'emergency'.

While the mechanisms of democracy put up a show of holding firm, the spirit of democracy did not. As the Chinese withdrew and began to concentrate on the border, emotional disruption of the country was visible more than ever before. In at least two of the States, Uttar Pradesh and the Punjab, which were geographically among the States closest to the threat, political rivalries were pitched at the highest key. Six out of the 15 Chief Minis-
ters of the States were openly accused of malpractices. One Central Minister was pushed out of office for corruption. Six Ministers of the Union Cabinet and six of the States were asked to resign in accordance with the “Kamaraj Plan” to deal with rifts and feuds swamping the Indian National Congress. Prime Minister Nehru acknowledged that corrupt practices were a bane of administration. All go-getters dived in for political power but none appeared to relate it to the threat from across the Himalaya. And men wondered where the values and freedoms of democracy were leading men!

After 1962 there was a new awareness among the people. The old shortcomings, admitted frankly and with grace, were sought to be plugged under new leadership. By assistance, investment abroad and indigenous effort, weapons were sought to be obtained to equip and modernize the armed forces. Leaders began to go out to the people, explaining the defence problems and sharing with them their difficulties and apprehensions created by the enemies. From 1964 onwards the Ministerial reports on defence were informative and intelligent and not merely an incoherent jumble of points, as they used to be once. During the conflict with Pakistan mobilization of forces and decisions were quicker, and, despite the collusion of Pakistan and China, India did well in checking infiltrators into Kashmir and taking the offensive in the Punjab.

Apart from a few changes of leadership and organization, nothing was altered as India shifted from a position of powerlessness to one of strength. The conclusion then would be that there was nothing particularly wrong in the impulse or mechanism of democracy, that it was flexible and adjustable, and that what really mattered was the availability and employment of proper men in proper positions.

Two notable achievements of India’s constitutional system against the background of military reverses and depressions were evident.

The first was that the country had been able to retain during a period of stress and strain a correct nexus of relationship between the military and the civil. Despite occasional rumours of the ambitiousness of generals and the collapse of political leaders, the fact was that the brass hat and the top hat
got on well together, the rank and file were loyal, and there were
next to no signs of the emergence of military dictatorship. Polit-
cicians have a knack of becoming the despair of the multitudes,
and it is unlikely they would live upto anything better than this
so long as they are politicians; India is therefore bound to down-
grade them now and then and talk of the miracles of military
dictatorship. But past events do not seem to have invested this
kind of rule with a special hallow.

The second was the sense of solidarity, of common cause and
joint effort which were so strikingly in evidence in 1965 against
Pakistan. This could have been due only to the impulse of
patriotism and freedom which had been fostered in a climate
of free debate, thrust and counterthrust, and appreciation of the
fundamental values of life which the Constitution had projected.
It was observed that despite a few restrictions on the press, in-
evitable under emergency, the country carried on eloquent, un-
fettered discussions on national affairs, on winnings and losses,
on the actual state of affairs on the front, and on hopes and
fears. It seemed that the reserves of democracy for delivering the
goods in tangible as well as intangible terms were inexhaustible.

As against this, democracy showed up its ugly aspects also.

The kind of national consensus built against Pakistan was not
built against Communist China. Some Indians, under influence
of Maoist ideology preached by a section of communists, sought
to tone down the Red danger from the north. Here then was
the case of a foreign controlled ideology being able to operate free-
ly because the country had accepted freedom of thought and ex-
pression as one of its norms of existence. The potentialities of
an influence of this kind, till at least India has had its own
ideological foundations laid firmly, cannot be discounted for
India's future.

Parliament was not effective. It is true that it gave hearty
approval to defence budgets, provided an excellent forum for the
discussion of defence problems, and through its debates, which
were widely reported, exhorted the people to keep their morale
up. The Government functioned in the name of Parliament and
even showed an anxiety to share with it its successes and failures.
But so far as defence was concerned Parliament meant just that
tiny part of it which constituted the Ministerial benches. As a
whole it did very little. Even some of its own reports prepared by the Estimates Committees on defence matters were lightly treated. The Consultative Committee on Defence might as well not have been set up. This highly resourceful body, that is Parliament, created practically no expertise on defence on a national basis, and so it simply rubber-stamped the decisions of the executive, an executive certainly democratic but not measuring up to the dimensions of the task in hand.

India's experience of war under democracy is not yet enough for firm conclusions, but one lesson is certain, that in order to survive democracy requires not only values but power.
CHAPTER 8

ECONOMIC TAKE-OFF

India has set out on its travel down the long road to material well-being and strength. For this it has harnessed the numerous available resources, manpower, the wealth of land, air and water, money and skill, ideas and faith, and foreign aid. It is well aware of the stakes. Material advance is a pre-requisite of the moral and physical health of a nation, and promotes those basic, vital satisfactions which contribute towards the stability of the state. It generates the principal elements of power and is an indicator of international position and status.

It is not within the scope of this book to go into the details of India's economic endeavour, which is multifarious and gigantic. Only the more salient features bearing on our theme will be dealt with. The present chapter is concerned with the principles and the mechanism of India's economic programmes, and with their strength and weakness.

1. TREND AND PATTERN

In the post-war period two trends in economic planning and development have been noticeable. A number of resourceful countries have sought to create the elements of well-being as
well as power, often sacrificing the former for the sake of the latter; the stress has been on heavy industry, weapon-making, establishment of defence infra-structure, and scientific enterprise embracing rocketry and space programmes. In these countries, the people are expected to suspend their demands for comforts till the nation has first built up a framework of national security and power status. Russia’s space programme and China’s nuclear programme, both accomplished at great expense and hardship to the people, are outstanding examples of a power-orientated national economy.

India has gone by the second trend. There have been four main objectives: abolition of poverty, liquidation of unemployment, reduction of income inequalities, and industrialization. All these are no doubt the foundations of power, as Jawaharlal Nehru used to say, but power has not been an articulated national objective. Even if all these objectives were achieved, power would not be automatically generated; for that an appropriate tie-up between the various programmes and a suitable machinery are required, apart from the initial assessment and allocation of resources. Only after 1966, in the Fourth Plan period, we first heard about “defence and development” together, but by then much water had flowed down the Ganga. Some of the pacific Indian traditions are probably deep behind this trend.

Another impulse, which has had a far-reaching consequence on the economic programme, is more readily traceable. The attainment of the four-fold objectives is only a part of the socialist pattern of society which India seeks to build. The key to this pattern lies in Article 39 of the Constitution. Under this the State shall direct its policy so that “the ownership and control of the material resources of the country are so distributed as best to subserve the common good,” and “the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.”

A resolution passed in Parliament gave a concrete indication of what this means: the state is to become the principal agency of the community, the public sector is to expand and the private sector is to conform to the framework accepted by the community, and the pattern of investments is to be determined accordingly.

Neither in the Constitution nor in the Plans is there any mention
of complete equalization of wealth, abolition of private property or interference in private family life. Nor would there be complete nationalization of the materials and means of production in the community. The pattern is "not rooted in any doctrine or dogma," and there is to be "a readiness to adapt institutions and organizations and their rules of conduct in the light of experience."

Having no precedents, Indian socialism has gone its own way. Thirty years behind Russian socialism and a century behind some of the more prominent socialist canons of Europe, it has been conditioned by this time lag of history, and is also coloured by its own environment.

It has nothing to do with the "socialist camp" and seeks no international connections. It does not have to quote chapter and verse from Marxist-Leninist texts. One of the objectives of the communist socialist states is "to display the greatest vigilance with regard to imperialism, maximize the might and defence of the entire socialist camp." India also talks about imperialism, vigilance and defence, but it does not do so in socialist terms.

In form and spirit Indian socialism is rather akin to the socialism of Western countries, and yet here again affinities cannot be stretched too far. Being miles ahead, socialism in the West has already done a good part of its work, narrowing disparities of income and providing universal education, employment insurance, old age pensions, state medical relief and other welfare measures. Indeed most socialist parties in Europe have now no special programmes. The British Labour Party has socialist ideals, so have the socialist parties of West Germany, France, Belgium and the Scandinavian countries; but all that they can tell the electorate is this, that on coming to power they will govern better than their predecessors.

In India, however, socialism is still clearing its decks and the task ahead is enormous and vast, and there are the teeming millions who say, with Marx, that they have "nothing to lose but their chains." Indian socialism has an emotional fire which has gone out of the socialism in Western Europe.

With this unique character of socialism, Indians must resolve some of their unique problems. For instance, socialism in India is confronted not only with economic inequalities and poverty but also the distinctions between caste and caste and community
and community. There are not only the economic barriers but religious and sentimental barriers, and the problem is to generate material uplift as well as psychological readjustments.

Besides, Indian masses today are impatient, thanks to the impact of freedom and the rising tempo of hopes. Socialist patterns therefore cannot grow here in the lordly fashion of Europe. Without much time at its disposal and also without faith in the iconoclastic violence of the communist countries for hastening the pace, Indian socialism must pervade a vast community and carry with it the feel of general welfare.

India’s socialism is often described as “democratic socialism”, to distinguish it from the rigid, watertight centralism of communist countries. It implies the widest and maximum discussion and consent. It also implies gradualness and continuity of the processes of achievement without a break through violence and revolution: “the trains should be running while the station is being built”, is the guideline.

This makes socialism an ideal instrument for a democratic country but a difficult instrument. The question would be, is it powerful enough for the pace of demands and achievements set by the people, the people whose discipline is certainly much below their ambitions? By its very nature it must seek to traverse along a road which lies between communism and capitalism. This by itself causes ambivalences in an emerging society. It is also subject to assault both from the “Left” and the “Right”. Assault from the Left is double-edged, externally from world communism which hopes to envelope all countries and internally from indigenous communist parties out to project their extremist designs. Assault from the Right is real, though less violent. In its economic relations with foreign powers, India is forced into economic non-alignment which, like political non-alignment, is difficult to practise.

2. PLANNING

Laissez-faire, the economy of free enterprise, lost much of its validity in the war of 1914-18, when the exigencies of defence demanded planned economy based upon accumulated resources: most of these resources only the state could muster. After this
an Adam Smith could not propose that governments be relieved of "the duty of superintending the industry of private people." In his book *The General Theory of Employment, Interest And Money* published in 1936 J. M. Keynes laid emphasis on regulating economic life; and President Roosevelt's New Deal was a great state venture.

Two years before the outbreak of the Second World War when the Ministries set up by the Indian National Congress instituted the National Planning Committee, planning was becoming the fashion. After the war the Provisional Indian Government of 1946 had an Advisory Planning Board, and by then planning had become in India, as in many other countries, a great necessity to rehabilitate devastated economies.

Economic activity may be planned in many ways. It may be centrally developed and directed, as in Russia; or it may provide the barest framework of national activity with minimum management controls permitting maximum freedom for individuals and groups, as in the United States. India has chosen a middle path and here planning means a combination of at least four things.

It is done at the centre. It determines the framework of development in the fields of agriculture, industry, social and welfare programmes, design of public revenues and expenditure, and administration. It postulates systems of control, direction and management of economic activity through fiscal and monetary policies and distribution of facilities. And while permitting free economic activity as far as possible, it contemplates direct participation by the Government in the activities of its choosing.

Some such system is inevitable in a society aspiring for a socialist pattern, a society which has gone about its way in a haphazard manner for generations, where inequalities are rampant, and where the extremes of centralization and of *laissez-faire* are not possible or consistent with democratic principles.

But there is the other side of the coin. Under this system, the state goes on acquiring property, assuming power and adding to its apparatus of administration. Is there any limit to the "statism" of the state? The state presumes that it has the requisite manpower and skill needed for its enhanced role in society, whereas in fact it may be deficient in both. The presumption that in enhancing its role it will not cut across the liberties of the
individual may not be borne out by facts. The operations of
the state may in fact give rise to a situation which promotes yet
another class of vested interests, which refuses to indentify itself
with the have-nots. When such a state does not deliver the goods
as promised, it begins to bear the stigma of wastefulness and
inefficiency and causes bitter opposition. Some such situation did
in fact arise at the end of the first three Plans in India when there
were witnessed financial instability, shortages and unrest.

Planning in India should be considered as being in an experi-
mental stage. Inspired by principles, it is ambitious, it covers a
large population in a vast territory, it has no precedents, and it
has its hazards.

India’s planning structure is provided by the Planning Com-
mission. The task of the Commission, established in 1950, is to
assess the material, capital and human resources of the country
and make out a plan for their utilization. In doing so it deter-
mines priorities, defines the stage of progress and proposes the
way in which resources should be divided. It also determines
the nature of the machinery which is necessary to implement the
plan. Its role is advisory and co-ordinating and it has no execu-
tive responsibility. Down at the State levels there are planning
departments in each State, rather ineffectual, and rudimentary
planning machinery in each district. The Commission functions
directly under the Cabinet, which takes into account economic
proposals sponsored by the various Ministries only after they have
been filtered through the Commission. The highest co-ordinating
authority is the National Development Council composed of the
Prime Minister, the Chief Ministers of States, and members of
the Planning Commission. This again is an advisory body but
by convention the national plan is presented to Parliament after
it has been approved by the National Development Council.

The Planning Commission could have been predominantly
composed of specialists, as originally intended, who could present
plans objectively and realistically. Instead, right from the begin-
ning it was dominated by politicians. Headed by the Prime
Minister it had some of the more senior Cabinet Ministers as
its members. All the four Plans built till 1967 thus carried the
strains of the expediencies of policy-making which clashed with
the principles of sound development. In that year many institu-
tions were blamed for India's slow economic progress, and the Planning Commission was one of them.

It was also criticized on other counts. Established as an advisory body it had developed as a kind of super-cabinet, which, in conjunction with the National Development Council, tended to reduce Parliament as well as the State legislatures to mere rubber-stamping bodies. Over-centralized, it was also lopsided, having no grass-root base in the States where its plans were implemented. Even though it had no powers, it began to determine, as we have seen in an earlier chapter, the quantum of grants made by the Centre to the States.

The Planning Commission has now been given a dose of reform. In the higher echelon, the political element has been reduced and there has been some pruning.

Meanwhile, however, it has planned for itself spaciously enough, for it has grown into one of the biggest organs of the Government of India. It may not be the nerve centre of the nation but is certainly the stocking centre of information about the nation. Whether it is also a stocking centre of the knowledge about the nation, of facts correlated with the realities of life, of data and figures in their combination of quantity, depth and dimensions, is yet to be finally tested.

3. THE FIVE YEAR PLANS

Some characteristics of India's planned economic development may be noted. Within a clear-cut long term period, it is divided into short, 5-year periods. In order to attain the specified objectives, certain yardsticks are employed to determine how much the total development during the long-term period should be and whether it would be in step with targets of the short-term periods. Then resources are determined to meet the requirements, which are channelled into the public sector and the private sector. These various elements of economic strategy must hang together at every stage, from policy to implementation.

1 The First Three Plans, ending on March 31, 1966 were each on a 5-year basis. For three years subsequently planning was on a year to year basis, even though a draft outline of the Fourth Five Year Plan was got ready. This draft was finalized only in 1969 with modifications.
The break-up into 5-year periods is for purposes of convenience and general stock-taking and has psychological advantages. But actually planning is a continuous process, and the Third Plan specifically talks of a long-term economic development, of the "need for a perspective," and telescopes through a generation, 1951-1976.

For a proper perspective a five-year period is obviously too short, and for many reasons. Certain projects like the building of dams are of long-term nature, with little effects in short spans of time. A pre-requisite of all development is education, which takes years to spread and influence the course of events. The inter-effects of development are traceable only over long periods.

But a long-term perspective has also its pitfalls. Planners are often too fond of long-term considerations, although in the long run, as James Keynes says, we are all dead. To visualize a whole generation from the present standpoint is subject to all the hazards and uncertainties of the changing international and national situations. Personalities change; men distinguished for planning today are practically extinguished a generation hence, and can conveniently throw dust in the eyes of the people on the pretext that they are making the reality of tomorrow more tolerable than the reality of today. While it is true that no community will survive unless it takes some thought for tomorrow, policies which concentrate too much on the distant goals are a snare, especially if they underestimate the sacrifices that people will have to make in the present for the glory of the future.

Indian plans use a few basic statistical yardsticks to determine the rate of progress. One is the "Harold-Domar model"—progress goes by the volume of investment and would be unsatisfactory unless the investment is at least 10 per cent of national income. Another is the "Rostow model", which tells of the stages of growth. There are three stages; the first is the traditional, the second is the transitional, and the third is the stage of take-off. After this, in a matter of 20-30 years, the growth becomes automatic.\(^2\)

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\(^2\) *Third Five Year Plan*, 1960, Chapter II.

\(^3\) The take-off period may be defined as a comparatively short interval of time during which an industrial revolution takes place in a society with decisive results. The concept has been developed by Professor
And so the Third Plan presents a perspective which is given in Table I at the end of the chapter. During the Third Plan the investment was 11 per cent of the national income, as against the saving of only 8.5 per cent, thus causing the need for foreign assistance. This was expected to go on till 1976 when investment and saving would be the same, and the latter would be adequate. So, statistically speaking, and by our two models, India would be home in a generation.

But it is not difficult to see the fallacy here. As the Fourth Plan was ushered, while the perspective was constant, the figures changed. In 1966, the national income was Rs. 1,99,900 million at current prices and only Rs. 1,59,300 million at 1961 prices. In real terms all yardsticks were thus altered.

At many places in the Plans one comes across this kind of mathematical dissertation and exercise with statistics. About this a word may be said at this stage.

In drawing the Plans statistics are of course necessary. India has done some splendid work collecting them. There are figures about investments and incomes, about produce of the fields and factories, about men, women and children and their education, employment, food and age, about airways, shipping and roadways, about houses and cattle farms and slums, and about trade and aid. All Plans have plenty of them; they hit the eye with the air of dead certainty, and after a while one is even hypnotized and swamped by their rush and power.

But there are four dangers about statistics which must be kept in mind.

They are not absolutely correct, despite every effort and intention; in fact in all the Plans they should be taken as approxi-

W. W. Rostow in his many writings including *The Process of Economic Growth*, Second Edition, Oxford, 1960. The take-off periods of some of the countries are as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>1780-1800</td>
</tr>
<tr>
<td>Germany</td>
<td>1835-1860</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>1840-1860</td>
</tr>
<tr>
<td>Japan</td>
<td>1880-1900</td>
</tr>
<tr>
<td>Russia</td>
<td>1885-1905</td>
</tr>
<tr>
<td>Canada</td>
<td>1890-1910</td>
</tr>
</tbody>
</table>

India's take-off period is reckoned 1960-1980.
mate. The value of certain figures is tagged to time; for instance, Rs. 100 of 1960 was only one-fifth of 1940 and may be anything of 1980, still it is always Rs. 100. Thirdly, there is the proverb “figures can’t lie but liars can figure”: and this reminds us that we must guard against the political use of economic arithmetic. Finally, figures are not necessarily related to the realities of life.

4. RESOURCES

Internal

Resources are of various kinds. There are the human beings. There are the natural resources of land, sun, air and water, and the raw materials of food, shelter, clothing and industry. There is the skill of the people. There is capital. All these have to be carefully correlated in order to activate the processes of development. Physical resources can lie stagnant without capital, and capital will be wasted if physical resources are not there. Raw material, skill and capital are of course tangible, but there are also intangible resources, such as the determination and enthusiasm of the working force, leadership, and the power which springs from the civilization of a people. Quite frequently planning is based only upon what is tangible, and Indian planning is no exception; this explains why progress is sometimes not taking place fast enough.

Financial resources form the most articulate expression of what India has sought to put into the kitty. Table II at the end of the chapter gives a reasonable idea of how much money has been used and where it has come from during the First Three Plans. Alongside are stated the resources visualized for the Fourth Plan. In the Table the distinction between “outlay” and “investment” has been kept in deference to our planners’ way of presenting expenditure. Figures, let us bear in mind, are only indicative.

Outlay is investment plus overheads. To all intents and purposes it is outlay that matters for us because it correctly represents the resources raised.

It would appear that during 1951-66, over a period of 15 years, India spent Rs. 2,70,000 million on development. Out of this Rs. 37,000 million came through foreign assistance. Thus India
managed to raise internally nearly 90 per cent of the total. [See note in Schedule I (B) on value of the rupee].

This money came in many ways, as Schedule I shows. Private individuals and bodies produced the most of Rs. 1,18,000 million for the private sector. For the public sector Government collected Rs. 41,000 million mostly by taxation, Rs. 16,800 million out of public savings, Rs. 18,900 million out of loans, and Rs. 14,000 million from public enterprises.

But here the Government came to the end of its tether, for no further moneys could be found. Thus there was "deficit financing", which really amounts to issuing cheques against a bank balance which does not exist; it came to a colossal sum of Rs. 24,800 million.

Indians have done good work in raising funds out of their own scanty resources, but through miscalculation, wastage, slow rate of growth or ignorance, these funds have not footed the bill. The deficit financing has been the heaviest single blow to India's planning and development.

*External*

Since in terms of models and in terms of reality India's own resources have not been enough, resort has been made to external assistance. This of course is quite in the game, for once upon a time even Britain borrowed heavily from Holland, the USA from Britain, and Russia from both.

External assistance began to come even before planning started. Later, it came through the Colombo Plan, formed in 1950; today the Plan has 22 countries as its members. Substantial, internationally organized aid started only from 1958 when the Aid India Consortium was formed; today this Consortium consists of International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), and ten other countries—Austria, Belgium, Canada, the Federal Republic of Germany, France, Italy, Japan, the Netherlands, the United Kingdom, and the United States.

Outside the Consortium the aiding countries have been Czechoslovakia, Denmark, Norway, Poland, Rumania, Sweden, Switzerland, Yugoslavia, Bahrein, and Kuwait.
Till September 30, 1967 the assistance was as follows: ⁴

<table>
<thead>
<tr>
<th>Item</th>
<th>Authorized</th>
<th>Utilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans repayable in foreign</td>
<td>56,800</td>
<td>44,300 Rs millions</td>
</tr>
<tr>
<td>currency</td>
<td>5,200</td>
<td>4,800</td>
</tr>
<tr>
<td>Loans repayable in rupees</td>
<td>13,150</td>
<td>5,770</td>
</tr>
<tr>
<td>Loans repayable through exports</td>
<td>6,700</td>
<td>6,000</td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodity Assistance</td>
<td>32,000</td>
<td>19,000</td>
</tr>
<tr>
<td>PL 480 and PL 665</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If we exclude commodity assistance, then out of a total of Rs 82,000 million offered, a sum of Rs 61,000 million was actually utilized till September 30, 1967.

Even though this utilized assistance came from twenty-two sources, as much as 75 per cent of it came only from seven sources as follows (in Rs millions): U.S.A., 15,360; IBRD, 6,400; W. Germany, 6,250; U.K., 6,000; IDA, 5,400; USSR, 5,000; and Japan, 2,300. The U.S.A. heads the list, and if to its 15,360 million is added the utilized commodity assistance of Rs 19,000 million, it would have contributed 57 per cent of the total assistance India received from all parts of the world.

India has required assistance to plug the gap between domestic savings and the total moneys required for development, to procure machinery and base material not available in the country, and to get technical skill. It has been channelled into hundreds of projects, big and small, dozens of which like steel manufacture, oil exploration and refining, heavy electrical machinery, fertilizer manufacture, production of atomic energy, ship and aircraft building, and construction of dams could not have been undertaken by Indians on their own. The food assistance has been indispensable in the face of droughts, inadequate foodgrains production at home, and the mounting demands of a rising population.

Altogether the assistance has been a factor of economic reconstruction, political stability and the foundation of power.

But there is the other side. First of all, “assistance” is not the

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right word. Out of Rs 61,000 million utilized only Rs 6,000 million represents non-returnable grant. The rest of the amount, which is 90 per cent of the total received, is to be paid back. A small amount of Rs 4,800 million is to be paid back in rupees. Another amount of Rs 5,770 million would be adjusted against the export of goods to the countries concerned. The rest, which forms three-fourths of the total, is to be paid back in foreign exchange at varying rates of interest. By the beginning of 1969, India owed over Rs 58,000 million to foreign countries at the post-devaluation rate of exchange, and this is a heavy burden.

Despite this, however, it has been looking out for aid more and more. Not only did the assistance go up, it created a psychological climate in which it was assumed that assistance would always come. Such an assumption has not turned out to be correct, and the stoppage of aid during the conflict with Pakistan highlights this fact. Too much dependence upon external assistance has led to slackness in the inventive effort at home. There would have been quicker and more efficient utilization of assistance if its vagaries had been taken into account; some of the priorities of planning would also have been better formulated. Now that all the expectations and miracles of assistance have not come true, politicians are busy complaining against the aid givers rather than thinking over the inaptitudes at home.

The ideal that the aid ought to be without strings, inspired by the notion that the underdeveloped countries have some special rights and the advanced countries have some special obligations, has not been achieved; no wonder that the Second United Nations Conference on Trade and Development held in New Delhi in 1968 was able "to obtain very limited positive results", as its Secretary-General said. Politics has always been behind aid. It was first brought into relief by Russia's entry into the field of assistance in 1955, when the West proclaimed that India was going 'red'. It was a balancing factor in international relations and a countervailing force in a world dominated by the old guard of the West.

Communist countries have helped in the establishment of key industries and provided military assistance; in turn they have expected India to remain non-aligned and tolerate communism within the country. The Western Powers too have provided aid in crucial sectors; they too have expected India to be non-aligned. Rus-
sians do not talk about strings, but Americans do, sometimes loudly.\footnote{Ref. Policy Guidance for Foreign Assistance, 1963. Published by Agency for International Development, United States.}

In the overall picture, India has kept non-aligned in a remarkable manner, a fact amply reflected in the variegated ensemble of the aiding countries. But within the broad framework of non-alignment, policy differences with Big Powers have not been absent. The differences with the U.S.A. have probably been sharper; this is because it is spread more widely over the globe than Russia and thus offers a larger surface of friction. In accordance with the prevailing law of international life, America has taken its revenge, by establishing a military counter-weight of Pakistan in the sub-continent, thus taking a good deal away with the left hand what it has so generously provided with the right. Differences with Russia are also likely to develop, now that it too has taken to equating Pakistan with India.

**Schedule I**

**A. PLAN PERSPECTIVE AS ENVISAGED IN 1961**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National income (in million Rs)</td>
<td>1,45,000</td>
<td>1,90,000</td>
<td>2,50,000</td>
<td>3,30,000</td>
</tr>
<tr>
<td>Investment (per cent of national income)</td>
<td>11</td>
<td>15</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Domestic saving (per cent of national income)</td>
<td>8.5</td>
<td>11.5</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Per capita income Rs per annum</td>
<td>330</td>
<td>385</td>
<td>450</td>
<td>530</td>
</tr>
</tbody>
</table>

The above perspective could not be sustained, as the Fourth Plan was staggered by three years.

**B. RESOURCES FOR THE THREE PLANS**

The Plans use the terms "outlay" and "investment", the former being investment plus overheads. Official figures are available.
for both outlay and investment in the public sector, but only for investment in the private sector. Outlay figures for the private sector have been calculated on the basis of those for the public sector. Sources: *Pocket Book of Economic Information, 1965*, p. 194, *Draft Fourth Five Year Plan, p. 41*, and *Pocket Book of Economic Information, 1967*, p. 227.

**Public Sector Outlay**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current revenue, mostly through additional taxation</td>
<td>41,100</td>
</tr>
<tr>
<td>Small savings</td>
<td>12,340</td>
</tr>
<tr>
<td>Loans</td>
<td>18,910</td>
</tr>
<tr>
<td>Surplus of public enterprises</td>
<td>3,950</td>
</tr>
<tr>
<td>Contribution of railways</td>
<td>3,620</td>
</tr>
<tr>
<td>Misc. capital receipts</td>
<td>6,500</td>
</tr>
<tr>
<td>Provident funds</td>
<td>3,400</td>
</tr>
<tr>
<td>Compulsory deposits</td>
<td>1,150</td>
</tr>
<tr>
<td>External assistance</td>
<td>36,930</td>
</tr>
<tr>
<td>Deficit financing</td>
<td>24,770</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,52,670</strong></td>
</tr>
</tbody>
</table>

**Public sector outlay** 1,52,670  
**Private sector outlay** 1,18,000  

**TOTAL OUTLAY** 2,70,670

*Note.* Indian rupee was devalued on June 5, 1966 from the exchange rate of one dollar equivalent to 4.76 rupees to one dollar equivalent to 7.5 rupees. The figures in this chapter, relating as they do to the Three Plans ending March 31, 1966, are based mostly on the pre-devaluation rate.
CHAPTER 9

THE ELEMENTS OF ECONOMIC POWER

It would be incorrect to suppose that the economic power of a country could be measured with the help of a few items of production, however important. Technology is changing their relative importance. In certain situations even the nondescript items play a crucial role. And it is the cumulative effect of many processes of exploration and production which matters, rather than isolated achievement; these processes in turn include such elements as education whose influence is not tangible but is deep and certain.

Keeping this in view, the six elements of economic power presented in this chapter—agriculture, steel, oil, coal, power, transport and communications—should be considered only representative; but, by any measure, they are of the highest importance in any assessment of national strength. At the end of the chapter a schedule of production, development and anticipation in respect of various items over a period of 1950 to 1970 is given for a bird's eye-view of what India is doing in many fields. To repeat, the schedule is only indicative.

1. AGRICULTURE

Agriculture is, strictly speaking, the science and the technique of
supplying human wants by raising the products of the soil and by the associated industries. But its significance is wider.

In India it symbolizes villages, and in the villages live more than two-thirds of the population; 330 million, in 1969. This great mass of rural population has remained off the beat of affluence of which the urban population has taken a lion's share. When Gandhi talked of the toiling millions, it was the half-clad, mournful looking farmers, living in mud huts beside dirty lanes, that he had uppermost in mind. Since a socialist society has to rehabilitate and upgrade them, agriculture is the touchstone of a welfare state.

In the elections of February 1967, 160 out of 240 million voters lived in the areas where agriculture is practised, so that rural India is also the citadel of Indian democracy.

Agriculture is also wealth, as about half the national income comes from it. Out of the total export earnings more than two-thirds come from agricultural commodities. India has been short of food and has been compelled to import large quantities of foodgrains since Independence. Food is imported because it alleviates hunger: under socialism you can bury ten princes but you cannot let ten poor men die of starvation. Our foreign relations are thus coloured by agriculture.

Agricultural programmes are closely inter-related to industrial development. Experts say that in Latin America, Africa and Asia, which are the world's backward regions, no industrial revolution can take place unless the productivity of an agricultural worker increases and total agricultural production goes up.

Finally, countryside is the backbone of the armed forces, because soldiers, as distinct from the officer class, come predominantly from villages.

In this way, directly or indirectly, agriculture is a vital element of social policy and progress, foreign relations and defence, and the wealth of the nation.

To most people in India and abroad agriculture has meant foodgrains and their production, which is understandable because these are the primary needs of existence and have been scarce. But agriculture is much more than this in its content as well as in its infra-structure.

First, it includes cash crops—jute, groundnut, tobacco, cotton, sugar, tea, oil and spices. Apart from commanding heavy home
consumption, they are, in raw or manufactured form, India’s principal earners of foreign exchange. During the Third Plan this amounted to Rs. 26,000 million out of the total export earnings of Rs. 38,000 million and is expected to amount to Rs. 35,000 million during the Fourth Plan. For a good many years to come these cash crops would be the mainstay of India’s export trade. Agriculture also includes animal husbandry. There are in India, according to a census, around 300 million farm animals, 40 million sheep, 60 million goats and 100 million poultry. These are staggering figures. But India grows little fodder and the cow gives only one-tenth the milk per lactation compared to the more advanced countries. Under the plans, therefore, superior breeds, better rearing technique and more fodder are sought to be developed. Finally, it includes forests, the producers of industrial wood.

Land reform is probably the most significant item of agricultural infra-structure. Its central theme is, “land to the tiller.” Laws have been enacted to abolish intermediary tenures in all the States. The farmer is not yet the owner of land in every case, but where he is the tenant, his tenancy has been secured. All States have fixed the ceilings on land, as also fair rent which is generally one-fourth the produce. While effort has been made to render farming the direct concern of the individual or the family—there are 66 million families at present scattered in 5½ lakh villages—co-operative enterprise is encouraged or built in almost every branch of activity. The whole country is divided into districts, blocks and villages, of which blocks have been made the units of development; in this three-tier system is also instituted panchayat raj. Thus development is dovetailed into democracy.

The infra-structure also includes numerous facilities such as roads into the villages, storage and warehousing establishments, and marketing. It also includes irrigation and power, as well as credit through banks or agricultural co-operative societies. During the Fourth Plan there will be 29,000 agricultural graduates in the country, while a large number of farmers’ education centres would be opened. India’s agricultural research is making rapid strides and is directed to the evolution of a variety of strains, drought-resisting crops, and high-yielding seeds. Scientists are investigating the biological basis of food production and the Indian Agricultural Research Institute, New Delhi has a “Gamma Gar-
den" experimenting with the application of atomic radiation to agriculture.

All this now brings us back to the central theme of agriculture, food. India produced 60 million tonnes of foodgrains in 1950 and 90 million tonnes in 1965; then the production went down due to droughts etc. Meanwhile, population increased and the demands of the people rose, forcing the country to import foodgrains, mostly from the USA. From 1954, when America's P.L. 480 legislation was passed, to March 1966, India signed agreements for the supply of 40 million tonnes of wheat, rice, maize and sorghum. This would show more than 3 million tonnes of supply every year, but actually 6 million tonnes came in 1965, and 20 million tonnes were asked for 1966-67.1 Thus imports were mounting, and it was with a view to stem the tide of the foodgrains invasion that the Draft Fourth Plan projected a target of 120 million tonnes in 1971.

Foodgrains can come only out of land. In India's land area of 810 million acres, the topographically usable area is 510 million acres. Out of this, 350 million acres is available for agriculture. Keeping little for meadows etc., as is done in other countries, India uses the whole of it to raise crops and 80 per cent of it to grow grains; the prospects of adding to this agricultured area are negligible.

If you wish to have a picture of what Indians have been doing with their land, you must go back to the Aryans, who cut down the forests, went on adding land to their farms, and cultivated them ever more and more. This was alright upto a point, in fact, right upto the early decades of the present century, when India not only raised enough foodgrains for itself but also exported them; famines were there, but more due to maldistribution than inadequacy of foodgrains. But the Indians did not culture their land and so the land got exhausted; they forgot that one reaps not only as one sows but also as one manures, weeds, cultivates and waters. As a result nearly one-fourth of the country's land surface suffers from soil erosion and the average yield of the

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1 Ref. USIS press release March 9, 1966. Other commodities included cotton, tallow, tobacco, milk powder and canned fruit: total value Rs. 15,636 million.
major crops in India is one of the lowest in the world.²

If, as it is said, civilization grows out of the ten inches of top soil, then India's top soil has become so inert and lifeless that Indian civilization might be taken as having ceased to grow.

India's main strategy to meet this situation lies in improving water supply, soil conservation and land reclamation, and the use of technology for higher yields.

In this context, the role of irrigation is paramount, remembering that it is the shortage of water in certain areas, too much heat of the sun, and the erratic nature of rains, with their inadequacy or bad distribution, which are a principal cause of shortages in production.

India's irrigation projects are called 'minor' if water is obtained from underground or from rains collected in tanks, and 'major' and 'medium' if it is obtained from rivers. It is the latter on which India has invested heavily, by constructing dams at strategic points and drawing water by digging canals and channels. Out of the estimated total of 1,360 million acre-feet of water in the rivers, nearly 450 million acre-feet is said to be available for irrigation; a little less than half of this would be available by 1970. Ultimately all irrigation schemes³ could cater for about 200 million acres of land. But by 1970 they would cater for about 100 million acres only; and by then India would have invested Rs. 23,000 million in them. That gives an idea of the future commitments.

But, "however much irrigation may spread in India, there will be still left an area of 140 to 150 million acres in which increased yields have to be obtained mainly through contour bunding, soil conservation and dry farming techniques."⁴ Much work remains to be done in this field.

Technology is presently directed towards producing plant nutrients. Plants need food as much as human beings. Inasmuch as water alone is not food, irrigation by itself cannot provide all that is needed for plants to give higher yields. Of the ten main plant

² *India Pocket Book of Economic Information*, 1967, p. 190, gives some comparative figures.
³ 500 major and medium schemes have been taken up during the first Three Plans, out of which half were completed by 1966 and the rest were carried over to the Fourth Plan.
⁴ *Third Five Year Plan*, p. 369.
nutrients—carbon, oxygen, nitrogen, hydrogen, phosphorous, potassium, sulphur, calcium, magnesium and iron—carbon and oxygen and partly nitrogen come from air and the rest come from the soil. Most soils however do not contain phosphorous and potassium, which therefore are commonly regarded as fertilizer elements, computed in tonnages of \( \text{P}_2\text{O}_5 \) (phosphorous pentoxide) and \( \text{K}_2\text{O} \) (potassium oxide). Similarly there are tonnages of \( \text{N} \) (Nitrogen).

When derived from plant and animal products, e.g., cattle dung, urine, compost, oilcakes, night soil, fish meal, sewage, sludge, farmyard manures etc. they are called organic fertilizers. All over the world new ideas of sanitation are forcing these materials out of towns and villages into rivers and oceans. This process is not yet in full swing in India, which has large resources of organic fertilizers. But they are wasted and in any case would not be enough to balance the drain of nutrients from the soil.

Hence the need for inorganic fertilizers. For a land of 250 million acres, that is, a little over two-thirds of our agricultural area, the estimated yearly requirements are stated to be \( \text{N}_1 \), 3.4 million tonnes, \( \text{P}_2\text{O}_5 \), 1.7 million tonnes, and \( \text{K}_2\text{O} \), 2.2 million tonnes. The Draft Fourth Plan targets are respectively 2 million tonnes, 1 million tonnes and .36 million tonnes; so even that would leave the country much behind the needs.

Despite the existence of a few fertilizer production units, fertilizer industry is in its infancy, and, as usual with a major indigenously controlled enterprise needing foreign assistance, some international politics is involved in its establishment. But it has the advantage of profiting by the latest technique about the incorporation of tracer elements, production of mixtures containing pesticides and fertilizers, and use of radioactive isotopes for matching fertilizers to individual soils and crops.

Not everything is happening to agriculture according to the Plans. Infra-structure is weak, administrative bodies overlap, and politics intrudes. But financially, technologically and psychologically agriculture has registered a breakthrough. Even under adverse conditions, the average agricultural growth rate has increased to 3.9 per cent from 1/2 per cent prior to 1950. More important,

5 Indian Council of Agricultural Research Review Series No. 2 gives figures of the resources.
in the countryside a revolution has been set afoot and a new rural
generation is getting into its stride.

This generation faces a great task. It must make the land yield
wealth to match the requirements of a mounting population and
expanding industry. It must turn the villages into living cells,
changing them from the torpid dots that they have been for cen-
turies. These villages can no longer remain isolated and should
develop links in the chain of national life. Meanwhile they are
subject to the powerful stresses and strains of democratic proces-
ses and technology, which impinge upon their ancient silences, the
splendour of their greens and the havoc of their wastelands. In
their own way, in their fertilities as well as privations, villages
have all along been a pillar of strength to the Indian way of life.
They must continue to be so in the midst of India's search for
power under the new conditions.

2. STEEL

There is an axiom, "as steel goes, so goes the economy". This
may not be wholly true, because substitute materials like alumi-
nium are growing, making steel a lot less basic than it once was.
But there is no doubt that steel is the biggest single force in in-
dustry, and without it progress in numerous sectors of national
economy will come to a standstill.

Steel is needed for wheels and rails, and therefore transport;
for beams, and therefore construction; for plates, and therefore
storage; for ships, aeroplanes and tanks, and therefore defence.
Besides, it is fashioned into literally a countless number of items
of daily needs and purposes. It can be made soft enough to be
scratched by a penknife and hard enough to be scratched only
by diamond. It can be so ductile that it can be bent double and
so hard as to scratch glass. It can be turned into any shape, readi-
ly joined by welding and inseparably coated with other materials.
Without steel there would be neither cans nor compasses, cables
nor cantilevers.

As steel goes, so goes not only the economy but civilization.

Steel comes from iron, which therefore is the most important
base material for the steel industry. India has probably one of the
largest iron ore reserves in the world, estimated at 21,000 million
tonnes, as against 17,000 million tonnes of Europe excluding
the USSR, 15,000 million tonnes of North America and the West Indies, and only 3,500 million tonnes of Russia; they are about one-fourth of the world’s reserves.\(^6\)

Iron ore is found in many parts of the country, including the States of Bihar, Orissa, Madhya Pradesh, Andhra Pradesh, Mysore, Maharashtra, and Rajasthan, but its greatest concentration is in the former three States, where, accordingly, the largest steel-building plants are now located. Of the two principal types of ores, haematite, the “red ore”, is the chief variety used for the production of iron and steel, having an iron content up to the level of 7%, which is rated very good. Magnetite, the “black ore”, is even richer but is not used because of its resistance in blast furnace.

From 3 million tonnes in 1950, the production of iron ore rose to about 25 million tonnes in 1967. A major portion of this production is required for national industry, but Indian iron ore has a substantial foreign market, particularly because of its good quality, which is comparable to that of Brazil, Sweden and Canada. Japan has accounted for a substantial portion of the total export, part of which it sells back—in the form of steel. Japanese interest in this trade has included development of transport and export facilities in the mining areas, particularly a railway and a port in Orissa.

Iron ore industry awaits research and development in many fields: mechanization of the mining process, control and treatment of ‘fines’ produced during mining, and above all utilization of low-grade iron ore.

Coal and limestone are the two other raw materials required for steel making. India has large coal reserves but only a small percentage of these is of the coking variety acceptable in blast furnaces. This is a serious shortage, although by no means exceptional for India; most countries do not have sufficient good quality coal and are now confronted with the problem of converting poor coal into suitable coking variety, and this calls for scientific investigation. Limestone is in abundance in the country, but not yet fully proved and not in close proximity to the steel belt.

\(^6\) *Indian Minerals Year Book*, 1960, p. 190. These estimates are however subject to revision.
Steel is produced both in public and private sectors. Of the public sector the showpieces are the Bhilai Steel plant, built by the Russians who will also build the Bokaro plant; the Rourkela Steel Works, built by West Germany; and the Durgapur Steel Works, built by the British. This international effort is truly a symbol of the non-alignment policy in action. In the private sector are the Tata Iron and Steel Company and the Indian Iron and Steel Company.

India produced 6.2 million tonnes of ingot steel and 4.6 million tonnes of finished steel in 1966. During the Fourth Plan all existing steel plants would be expanded; in conjunction with Bokaro, their production by 1971 would be about 12 and 8 million tonnes of ingot and finished steel respectively. Their capacity, however, would be of about 15 million tonnes of ingot steel or 10 million tonnes of finished steel. India has been importing steel in the first three plan periods and would be doing so probably till 1975; in 1971, the shortage of steel would perhaps be about 3 million tonnes. India has also been importing special steel, alloys, tool and sheet, which are needed for defence; this gap, left wide open in the initial production schemes, might be filled during the Fourth Plan.

Some significant aspects of India’s steel industry may be noted.

Over all the Four Plans, it has been established with foreign skill and money; these would have to be cut down. Two factors are of importance in this connection, the establishment of training facilities and the completion of the heavy machinery plant being set up at Ranchi which would provide machinery for steel production. Indian aspirations about selling steel abroad would have to reckon with the fact that steel monopolies, such as that of the European Economic Community, offer stiff competition and that there has already been generated surplus steel producing capacity in the world. Steel industry must take into account the factor of dispersal. Its concentration in one region is undesirable strategically and causes regional jealousy and wrath politically. The southern parts of India have been wanting steel plants, and so a considerable effort has gone into the Neyveli iron project in Madras, with a plant capacity of half a million tonnes. Goa and Vishakhapatnam might be two other centres, and here a precedent might be set of importing coke from a foreign country, such as
Australia, rather than transporting it from home mines.

Steel industry is labour intensive and, for the amount of heavy investment, provides only small employment. Exigencies of economy might dictate further reductions in labour, considering that automation is coming to steel and computers are already running a few steel mills. This aspect has its social nuances.

Apart from automation, steel research includes development of economical ways of utilizing lower grade iron ores, an effort in which India must also participate to save its good quality ores from depletion. The preparation of ores, coal and limestone for use in the blast furnace has advanced, leading to greatly improved furnace performance. The designs of the blast furnace are also changing, and new designs of open hearth furnace are being tested; a relatively young process challenging the open hearth is of the top-blown vessel using oxygen. There is even a possibility of making steel directly from iron ore at a cost lower than the conventional process. And while this is happening, plastics, aluminium, cement and non-ferrous alloys are capturing the markets once held by steel.

These are all matters of significance for the future of the steel industry, particularly for countries like India which have begun to blaze a trail in this line.

3. Oil

From 1899, when the Assam Oil Company took its oil lease, to 1947 when India became free is half a century, but during this period the "liquid gold" industry made a poor showing. Nevertheless, oil has been, and still is, in the consciousness of an average Indian as few materials are. For oil is kerosene, and in this country where electric power is scarce, kerosene is used for lighting homes by an overwhelming majority of people. Without kerosene millions of homes will be dim and dark, and their occupants will think very dimly and darkly of the government which cannot supply enough of it. Of the one dozen major materials which come from oil, kerosene heads the list, accounting for 25 per cent of total production.

There are other numerous uses of oil. From household goods such as lipsticks, soaps, dyes and fabrics, oil is used in fertilizers
and rubber, in engines, steamships and locomotives, and in explosives, war vessels, armoured vehicles and military aircraft. The vital use of oil in war has never been in doubt ever since the invention of the first petrol-propelled vehicle towards the end of the nineteenth century. Between the coming of explosives in the eighteenth and of atomic energy in the twentieth century, oil represented a landmark of military power. Therefore, when after the First World War Lord Curzon said that "Allies floated to victory on the waves of oil", he was talking of a great historical phenomenon.

The bombing of oil centres in the Second World War was a matter of urgent strategic necessity and undertaken with great seriousness. The Russian Baku oilfields escaped capture by the Germans narrowly, but this gave the Russians a lesson, for, ever since, they have been developing oil in less vulnerable areas, such as Volga-Urals. The paucity of oil in China is a national handicap, just as the abundance of it in Russia—a fantastic 8 billion ton reserve is claimed—is its great weapon. In peace-time, oil provides a focus of international interests, such as in the Middle East which contains a little less than two-thirds of the world's proven reserves of oil.

Since Independence the exploration of oil has evoked major endeavours on the part of India. With the exception of the central core of the South almost the entire country is under investigation. A major assault has been made, as might have been expected, along the Indian sector of the great Asian oil belt extending across Borneo, Sumatra, Burma, Iran, Iraq and Saudi Arabia. Assam, which lies in this belt, has already yielded oil; other areas under exploration are West Bengal, Uttar Pradesh, Punjab, Jammu and Kashmir, and Rajasthan. As petroleum is also found in sedimentary beds usually of marine origins, the entire coastal belt of India can be reasonably expected to contain oil; hence Gujarat, Madras, Orissa and Andhra Pradesh fall within prospective oil-bearing areas; so do the Andaman Islands.

To hit upon an oil-field, which often lies a mile or two beneath the earth's surface, is a time and-money-consuming job, apart from skill-demanding. But India has been lucky; by 1967, 500 wells were drilled, a large majority of them successfully. So far the Gujarat reserves have proved to be the largest in the country. In
this connection, India has been busy importing skill in all shapes, for geological surveys, geophysical surveys, and exploratory drilling. Two special oil bodies have been set up, the Oil and Natural Gas Commission, which is a Government-owned, statutory body having technical assistance of the Soviet Union, and Oil India Ltd., a joint venture of the Government of India and the Burmah Oil Company. Both explore and produce mineral oil.

There was a negligible output of oil within the country till 1960. Today it is about 7 million tonnes and is expected to be nearly 10 million tonnes by 1971. By that date however India would still have to import more than double the quantity of its own production, for its requirements by then are estimated to be 22 million tonnes.

But this is crude oil. Refining of oil is as important as exploring it, for without it oil is useless for most purposes. The establishment of refineries is therefore one of the core Indian projects. It falls within the public and private sectors.

Four oil companies, Assam Oil, Burmah Shell, Stanvac and Caltex Oil have been in the private sector since 1954, with refineries located at Digboi, Trombay and Vishakhapatnam. Government established refineries are in Nunmati in Assam, Barauni in Bihar, Koyali in Gujarat, Cochin and Madras. By the end of the Third Plan a capacity of 10.5 million tonnes was established, which is to be nearly doubled by 1971; a little more than half of it is expected to be in the public sector.

A showpiece of oil refining is the 720-mile long pipeline in north-east India, the second largest in the east, connecting Naharkatiya-Moran oil-fields with Nunmati. It is designed to carry 2.75 million tonnes of crude oil through its 250-mile long, 16-inch diameter section upto Nunmati, and thence forward 2 million tonnes through its 14-inch diameter to Barauni.

As of steel, but more so of oil there are political and military aspects. Indigenous oil industry is of recent origin, established mostly with the help of communist countries. Russia is principally responsible for oil exploration, and its experts not only predict more oil discoveries but offer further assistance. The Barauni refinery is built with Russian help and the Nunmati with Rumanian help. But long ago oil was a western monopoly in India. Militarily, the Himalayan oil belt, presently the major oil producer,
has come under cold war, and part of it was almost overrun by
China. The Digboi oil-field is in fact only a 100 miles from the
point where the Chinese halted after their head-on dash through
Walong in NEFA. Besides, the pipeline of Assam-Bihar is close
to the Pakistan border. This gives some urgency to the dispersal
of oil industry.

4. COAL

So far as commercial energy is concerned, coal is on top; its
consumption forms three-fourths of the total energy consumed
in India, the rest being shared by petroleum and hydro-electric
power. This proportion of consumption is not likely to alter in
the near future. Therefore, coal has been and will remain the
king of energy, and the oldest king at that.

Indian coal traces its origin to the Lower Gondwana era of 250
million years ago; oil, which in point of growth and composition
belongs to the same era, is half that age. Two hundred and fifty
million years ago bits and pieces of vegetation began to drift, as
geologists say, and began to settle in lagoons and marshes. In
those bygone days the importance of this stray happening in the
bosoms of the earth could not have been realized, for through
the travail of millennia it has resulted in coal, and coal is woven
into the stuff of living.

The most popular use of coal in India is for heating. It is also
used for chemicals and light oils. It is indispensable for the smel-
ting of iron ore: all Indian steel plants use coal for their blast
furnaces, except Mysore Iron and Steel Works which use electric-
city. Since locomotives are today overwhelmingly dependent upon
coal-generated steam and very meagrely on oil and electric power,
coal governs rail transport. It is useful in the production of ferti-
lizers and the conditioning of soil. It is thus a factor of industrial
power, agricultural advance and mobility in the country.

There are many ways of expressing the coal reserves of India,
by the depth underground where the mineral is found, by the
thickness of the seams, by the presence of ash content and mois-
ture which determine its purity and use. The Indian Bureau of
Mines, the Geological Survey of India, and the National Coal
Development Corporation have all their own estimates of reser-
ves, which differ. They vary from 60,000 million tonnes made in 1930 to 30,000 million tonnes made in 1950. Nearly 98 per cent of the coal dates from the Gondwana times, only 2 per cent is of later date.

The Gondwana coalfields are mainly in three tracts: the Damodar and Sone valleys in Bengal and Bihar, the Mahanadi valley in Orissa and Madhya Pradesh, and Gondwana and Wardha valleys in Madhya Pradesh and Andhra Pradesh. There are as many as 80 of these fields, if not more, and the best are: Raniganj in West Bengal; Jharia, Bokara, Karanpura and Giridih in Bihar; the Panch valley and Kahan valley in Madhya Pradesh; and Singarëni in Andhra Pradesh. This coal is mainly bituminous. The lignite variety is found in Madras, Kerala, Rajasthan and Jammu and Kashmir. About 150 miles south of Madras, lignite reserves in Neyveli, estimated at 2,000 million tonnes, are of major importance, primarily because of their potential and also because they are in the Dravidian South, where industry is backward, thanks to the shortage of minerals, and where complaints about industrial imbalance are rampant. The Neyveli thermal power plant using lignite as fuel, has already been built with Russian collaboration.

While coal reserves are impressive, by whatever estimate, the quality of coal is not so impressive. There are three main deficiencies. First, all Gondwana coals are higher in ash content and are therefore of poorer quality compared to the coals of Western Europe and North America. Secondly, ash is evenly distributed in the coal substance, which renders its separation difficult and consumes a considerable amount of time and money. Thirdly, the reserves contain only a small percentage of coal for coking or metallurgical purpose. The estimate of coking coal is 2,000 million tonnes, and its extraction is comparatively difficult. The presence of large quantities of low quality coal might however open a profitable field of research for converting it into synthetic petroleum; the Germans used this device profitably during the last war.

The pattern of production of coal is shown on page 193.

Against a production of 68 million tonnes in 1966, which is double of what it was in 1951, the production would be 106 million tonnes in 1971. The area of production is now substantially extending beyond the traditional Bengal-Bihar fields; and lies in
both private and public sectors. A certain proportion of clean coal for steel production is indispensable, estimated to be 19 million tonnes by 1971. Washeries with a capacity for 13 million tonnes were established during the Third Plan, and for the balance, are visualized to be established during the Fourth.

There are many problems of coal industry. Coal-mining is a dangerous, dirty, detestable business, which is one reason why it has become a source of discontent among the mining class all over the world, a symbol of the sorrows of the down-trodden in industry and a catalyst of social revolutions. Mechanization of mining is called for on humanitarian grounds and also on economic grounds. India is setting up plants to manufacture machinery for coal mining, but, for technical as well as social reasons, it would be a long time before mechanization gets into swing.\(^7\)

Coal industry is developed both in the public and private sectors. A peculiar handicap of the latter is that for historical reasons the coal industry does not attract capital in the shape of equity. Concentration of coal in Bihar and West Bengal often raises problems of transportation. Congestion of stocks at the collieries tends to assume serious proportions, whenever railways cannot cope with all the demands on movement. There are possibilities of transport of coal by road, sea and inland rivers, but they are contingent upon the availability of trucks, steamers and barges. Coal industry has also been hampered by inadequacies of suitable explosives and detonators.

The long-range problem of coal lies of course in the poor

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\(^7\) Machinery imported with World Bank loan was lying idle in 1966 for want of spares. Ref. address by Chairman, Indian Mining Association, Statesman, March 20, 1966.
quality of a very large percentage of the reserves. The estimated 2,000 million tonnes of coking coal is highly inadequate for the extensive programme of industrialization on which India is set. The ultimate solution would lie in research in making maximum use of poor-quality coal and harnessing other forms of energy, including nuclear energy.

5. Power

"Communism is Soviet power plus the electrification of the whole country," so goes a famous saying of Lenin. His successors have lived up to it. In 1929, when Russia launched the First Five Year Plan, Soviet capacity was 2.3 million kW, that is, what Indian capacity was on the inauguration of its First Five Year Plan. In 1967 it rose to 55 million kW, a figure which also reflected the tremendous pace and volume of its industrial development and its position in the frontline of world powers.

Indian capacity then was 5.7 million kW. Indian socialism did not contemplate power as communism did; in fact, in the early 1950's there were some people who thought that power projects such as the Bhakra, Hirakund and Damodar Valley Corporation were too big and above the requirements of the country. In less than a decade, however, on the eve of the Third Plan in particular, there were complaints of power famine all round and industry was either staggered or running below capacity. It was then that the correlation between national welfare and electric power came to be realized.

Hydro-electric generation has been a most popular and spectacular effort of India in the years of planning. A principal drag on it, however, arises from seasonal variations in the flow of rivers. Snow-fed rivers of the north dry up into little streams during winter, thus necessitating the use of dams for assuring a certain minimum level of reserve. In the south there are no snow-fed rivers; gigantic civil works have therefore been erected to impound the monsoon waters; still, power generation in the dry season falls short of capacity.

The Energy Survey Committee established in 1963 provides the broad perspective for the development of power. On the basis of a 6 per cent growth of national income, the requirements of
installed capacity have been assessed as approximately 5.6 million kW, 19 million kW, 29 million kW, and 46 million kW for 1961, 1971, 1976 and 1981 respectively. The growth of this capacity by different types of plants is placed as follows:

<table>
<thead>
<tr>
<th></th>
<th>1960-61</th>
<th>1965-66</th>
<th>1970-71</th>
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<tbody>
<tr>
<td>Hydro plant</td>
<td>1.92</td>
<td>4.14</td>
<td>7.68</td>
</tr>
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<td>Steam plant</td>
<td>3.43</td>
<td>5.61</td>
<td>11.47</td>
</tr>
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<td>Oil plant</td>
<td>.30</td>
<td>.42</td>
<td>.27</td>
</tr>
<tr>
<td>Atomic plant</td>
<td>—</td>
<td>—</td>
<td>.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5.65</td>
<td>10.17</td>
<td>20.00</td>
</tr>
</tbody>
</table>

The Committee also worked out that hydel was the cheapest method of generating electricity. By 1966, there were 82 power stations in India with a capacity of 50 million watts and above.

By the census of 1951, there were in India 560,000 villages and towns of varying population. Only one-tenth this number was electrified by 1966. Electricity reached mostly towns with a population above 5,000 and a few with a population above 2,000. But an overwhelming majority of the population centres have a much smaller number of inhabitants, and out of these only a few can hope for electricity in the near future.

Thus electricity with all its reputation of fast travel will travel rather slowly to the heart of India.

This not only affects the rural sentiment but also the rural economy. Rural electrification has a great value in establishing small-scale, power-run industries in the countryside, which would open employment opportunities and relieve pressure on land.

Difficulties have arisen both in the generation of power and its transmission, because of the shortage of equipment as well as artificial State barriers. The construction of heavy electrical plants is under way, and it is estimated that by 1976 it should be possible to sustain the entire growth of power in the country from the output of these plants. Gradually, the States are coming round to the establishment of regional grids for the distribution of power.
6. TRANSPORT AND COMMUNICATIONS

A well-ordered country is like an animal, as Aristotle would say, of which transport lines are like veins and arteries. For at least three reasons these are of pre-eminent importance for India.

First of all, these are needed for national integration. People should be enabled to come out of their isolation, move, mix, and promote contacts, and nothing breaks regional insularity and caste-ist separatism as a railway, roadway or airline. Secondly, India is developing in numerous fields and on a countrywide basis, when raw materials have to be moved to distant factories and finished goods have again to be carried far and away for consumption; this inflow and outflow of industrial materials as well as the widespread network of trade require quick, reliable and adequate means of transport. And thirdly, supply lines are essential for defence as the debacles of NEFA and Ladakh highlighted; one reason for these was that the transport system was not upto the mark both in the battle zone and in its hinterland.

Programmes of transport and communications embrace railways, roads, shipping, inland waterways and air services, posts, telegraphs and broadcasting. But there are other modes of travel although not specifically mentioned and although they are the most prevalent and popular since the remotest times. Among these are the animal driven vehicles, of which there were 10 million in 1959 according to an official report. Going about on foot is almost a national habit, very much in evidence in daily life, pilgrimages, and wars. In the Sino-Indian conflict mules and men were among the most reliable carriers of material, and they still are.

In the transport system railways stand pre-eminent. They are one of the oldest Indian enterprises, and the main carriers of heavy goods in the country, involve huge investment, and are revenue-earners.

In 1947, at the time of partition, there were 33,700 miles of railway route; which rose to 36,900 miles by the end of the Third Plan; 1,400 miles of new lines would be added by 1971. There is
a correlation between railway and advancement; judged by the route mileage in terms of territory or population, it is very low in India.

Indian railway gauge system is complex and baffling. There is not one gauge but four—5' 6'', broad gauge; 3' 3/8'', metre gauge; and 2' 6'' and 2', narrow gauge. None of these is the standard gauge, which is 4' 8½''. The multiplicity of gauges reflects the opinions and caprices of Indian administrators at various junctures of history.

Once it was thought that broad gauge was necessary not only because it lent itself to the carriage of more traffic but also could stand better the storms which blow violently in India. The smaller gauges were found less expensive and suitable for less developed, backward areas of low traffic. Altogether these four gauges tell upon quick movement for there are more than fifty points littered all over the country where goods have to change over between one gauge system and another. Between West Bengal and Assam there are two gauges, and this was a cause of delays in the Second World War when war equipment had to be transported from Calcutta to Ledo. Small gauges are now being broadened.

Over a broad gauge the maximum speed of railways is 60 mph and over a metre gauge 45 mph, which is much less than the performance in the U.K. or France, 85 mph. In other fields too the performance of Indian railways is rather low. This is partly attributable to the poor quality of railway tracks and partly to lower operational efficiency. The point of efficiency is important, knowing what Russia did with its otherwise backward railway system during and after the Second World War; it not only survived the war but also rendered itself a topmost country in regard to traffic output.

Indian railways carried 200 million tonnes of goods in 1966 and are planned to carry 300 million tonnes by 1971; in terms of passenger miles, the figures are 154,000 and 230,000 million. From 1,864 in 1966, the number of steam, diesel and electric locomotives would go upto 2,177 in 1971. These are being increasingly manufactured in the country, the electric and the diesel gradually replacing the steam.

In 1956, there were 177,500 miles of surfaced and 420,000
miles of other roads in India; in terms of road mileage per square mile of population, these are very low figures. Even after 1980, according to one calculation, a metalled road may be 5 miles and an unmetalled road 2 miles away from a village. Also, Indian roads do not stand as heavy a load as those in Europe. Half of these roads are all-weather, the rest are susceptible to rains and floods. More than 80 bridges span the numerous river crossings, and more are wanted; besides there are many missing links and weak culverts.

Since the beginning of the Third Plan road-building has become something much more than a mere extension of the network. There have to be roads for industrial and mining projects, for large cities and metropolitan areas, rural roads and strategic roads. Strategic roads in the Himalaya, in particular in Kashmir, Kumaon, Sikkim and Bhutan, and NEFA have become of great national importance, and their construction has been undertaken under a special semi-military organization.

Since 1960 considerable effort has also been made to organize surface transport system as a whole, eliminating in particular the endemic friction between the railways and the roadways. Practically every State has now its own road transport undertaking, still it cannot cope with more than one-third of the passenger traffic. Private enterprise is thus very significant in the carriage of goods and passengers all over the country, and has a creditable record. It is particularly effective in the more difficult regions and the border areas, where the lure of profits has attracted many an owner of buses and trucks.

India had a quarter million gross registered tons (grt) of merchant shipping in 1947, wholly for coastal operations and none for international trade. The following table would show the progress:

<table>
<thead>
<tr>
<th></th>
<th>Coastal Trade</th>
<th>International Trade</th>
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</thead>
<tbody>
<tr>
<td>End of Third Plan</td>
<td>330,000</td>
<td>1,130,000</td>
</tr>
<tr>
<td>End of 1971</td>
<td>400,000</td>
<td>3,000,000</td>
</tr>
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</table>

In 1966, the overseas fleet consisted of super tankers, bulk carriers, ore and oil carriers, tramps, passenger-cum-cargo ships and
liner ships, and was thus of a balanced character. But it carried no more than 15 per cent of the overseas trade. Even after very considerable expansion by 1971, this percentage would be low, for the estimate is that a capacity 4.5 million grt, expected to be available by 1976, would be enough to carry only one-half of the country's overseas trade.

One reason why the overseas shipping has expanded relatively fast is because it earns foreign exchange and this helps the purchase of ships from abroad. India is building its own ships, but slowly; about a quarter million tonnes are expected to be manufactured during the Fourth Plan period. It is on the home production mostly that the addition to the coastal units depends, and that is slow. By 1966 these units catered to the entire dry cargo trade and about 20 per cent of the oil movements on the coast.

As many as 233 ports exist on the 3600-mile long coastline of India, of which 166 are on the West Coast and the remaining on the East. Six of these, three each on the two coastlines, are major ports, namely, Kundla, Bombay, Cochin, Madras, Vishakhapatnam and Calcutta, to which additions are planned to be made. These ports, as also numerous minor ports, look forward to development in many fields, such as dock modernization, mechanization, dredging, addition of berths and extension of capacity, to cater for increasing industrialization and trade. Exploitation of resources in the hinterland accelerates port development. Such has been the case with Vishakhapatnam and Paradip, the latter a new venture, both of which bear the impact of large-scale extraction of iron ore in Orissa.

In the first twenty years of Independence the merchant navy progressed more than the fighting navy, but actually the two go together in the build-up of naval power. The expertise created in the manufacture of merchant ships is available to the Indian Navy which, by the end of the Third Plan, had just about begun making its own frigates. The development of ports of the East Coast adds to the new dimensions of security in the Bay of Bengal in which lie the Andaman Islands. The trading enterprise across the oceans gives Indians the sea-faring look which they really never developed on a national scale throughout their history.

From a fleet of 74 Dakotas, 12 Vikings, 3 Skymasters and a number of small aircraft in 1953, the Indian Airlines Corporation
developed in 1965 to 14 Viscounts, 10 Fokker Friendships, 4 Caravelles and a number of Dakotas. Air India had then a fleet of 9 Super Constellations and 5 Boeing 707s. During the Fourth Plan the Corporation would acquire 6 Caravelles, 7 aircraft to replace Viscounts and Skymasters, 15 HS-748s, and 15 smaller aircraft. Its capacity in tonne miles would go up from 70 million in the Third Plan to 150 million in the Fourth. Air India would buy another 5 sub-sonic jets. Its capacity would go up from 220 to 400 million tonne miles.

Indian Airlines operates eight trunk routes between Karachi—Delhi — Bombay — Nagpur — Calcutta — Madras — Rangoon — Colombo, and a large number of zonal routes within the three regions of Delhi, Calcutta and Bombay. All capitals of the 17 States are connected by air. Connected by air with India are also the capitals of five neighbouring countries, Afghanistan, Pakistan, Nepal, Burma and Ceylon. Air India has connections with two dozen countries abroad.

Air communications have a bearing on many facets of Indian life. They are a factor of importance in the processes of national integration. Till now however the achievement has touched but the fringe of the potential. In terms of the size of the country, air traffic is limited and confined to a relatively small area. Being expensive, it is available only to an elite class of Government officials, businessmen and tourists. Projects of “air bus”, with cheap fares and without frills, have been mentioned but not materialized. But mass air travel cannot come only through cheap fares; it needs a highly developed aeronautical industry and a large fleet of aircraft of reasonable variety. India is only at the initial stages of it; the HS-748, which consumed so much, has not come upto expectations, even though the Indian Airlines has begun to acquire it.

Air communications aid India’s development, facilitating quick movement of personnel and key material and close contact between the multifarious industrial centres spread all over the country. One specific potentiality of aircraft has perhaps not yet been fully exploited, and that is aerial survey, which is needed and is sometimes indispensable for exploration. Siting of dams and hydro-electric plants, chalking out the courses of canals and waterways, and prospecting for oilfields are only a few among the
numerous uses to which civil aircraft can be put. For this purpose, small, sturdy machines are needed, capable of taking off and landing in a small space.

Insecurity of borders has underlined the role of air communications in national defence. Civil aircraft have been used in practically every theatre of military operations. They were assembled in 1948 when troops were landed in Kashmir and again in 1962 when China struck. In emergency civil aviation becomes an adjunct of the defence effort.

And yet its limitations must not be overlooked. Civil pilots are generally not trained for the arduous as well as hazardous tasks such as air dropping. Civil aircraft contain luxurious appurtenances for public amenities, which tell heavily on its carrying capacity; in 1962-63, it was the cargo planes of specific designs which were really useful. Still, civil aviation is an important ingredient of air effort against attack, and this requires a close liaison between defence authorities and air transport departments.  

8 A Directorate of Co-ordination (Civil Aviation) at Air Headquarters with regional establishments was formed in 1966.
<table>
<thead>
<tr>
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<th></th>
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<td>million</td>
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<td>69.2</td>
<td>82.0</td>
<td>72.2</td>
<td>32</td>
<td>120</td>
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<tr>
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<td>million</td>
<td>23.8</td>
<td>30.3</td>
<td>35.5</td>
<td>41.8</td>
<td>76</td>
<td>54.8</td>
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<td>Irrigation</td>
<td>millions</td>
<td>2.3</td>
<td>3.4</td>
<td>5.6</td>
<td>10.2</td>
<td>344</td>
<td>20.0</td>
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<td>Power</td>
<td>million</td>
<td>3.0</td>
<td>4.3</td>
<td>11.0</td>
<td>23.0</td>
<td>667</td>
<td>54.0</td>
</tr>
<tr>
<td>Installed</td>
<td>million</td>
<td>32.8</td>
<td>39.0</td>
<td>55.7</td>
<td>68.0</td>
<td>342</td>
<td>107</td>
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<td>Iron ore</td>
<td>million</td>
<td>1.0</td>
<td>1.3</td>
<td>2.3</td>
<td>4.6</td>
<td>8.8</td>
<td>200</td>
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<td>Coal</td>
<td>million</td>
<td>5.5</td>
<td>10.4</td>
<td>43.2</td>
<td>85.0</td>
<td>15 times</td>
<td>40 times</td>
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<td>Finished</td>
<td>million</td>
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<td>179</td>
<td>272</td>
<td>276</td>
<td>32 times</td>
<td>40 times</td>
</tr>
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<td>Steel</td>
<td>million</td>
<td>1.0</td>
<td>33</td>
<td>111</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<td>Diesel engines</td>
<td>000 nos.</td>
<td>7</td>
<td>179</td>
<td>272</td>
<td>276</td>
<td>32 times</td>
<td>40 times</td>
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<td>Railway</td>
<td>numbers</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<tr>
<td>Locomotives</td>
<td>numbers</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<td>N fertilizers</td>
<td>000</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<tr>
<td>Sewing</td>
<td>numbers</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<tr>
<td>Machines</td>
<td>numbers</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
</tr>
<tr>
<td>Automobiles</td>
<td>numbers</td>
<td>9</td>
<td>80</td>
<td>33</td>
<td>16.5</td>
<td>14 times</td>
<td>55</td>
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<td>-------------------------------------------</td>
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<td>-------------------------------</td>
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<tr>
<td>Cement</td>
<td>million</td>
<td>2.73</td>
<td>4.67</td>
<td>7.97</td>
<td>10.8</td>
<td>20</td>
<td>296</td>
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<tr>
<td></td>
<td>tonnes</td>
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<td></td>
<td></td>
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<tr>
<td>Petroleum products</td>
<td>million</td>
<td>0.2</td>
<td>3.4</td>
<td>5.8</td>
<td>9.9</td>
<td>20</td>
<td>50 times</td>
</tr>
<tr>
<td></td>
<td>tonnes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Railways, million passenger km</td>
<td>000</td>
<td>66.5</td>
<td>62.4</td>
<td>77.7</td>
<td>96.0</td>
<td>119</td>
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<tr>
<td>Shipping</td>
<td>100,000 grt</td>
<td>3.9</td>
<td>4.8</td>
<td>8.6</td>
<td>15.4</td>
<td>30.0</td>
<td>295</td>
</tr>
<tr>
<td>Post Offices</td>
<td>000</td>
<td>36</td>
<td>55</td>
<td>77</td>
<td>98</td>
<td>110</td>
<td>172</td>
</tr>
<tr>
<td>Students in school</td>
<td>million</td>
<td>23.49</td>
<td>31.34</td>
<td>44.65</td>
<td>67.74</td>
<td>97.5</td>
<td>188</td>
</tr>
<tr>
<td>(Age 6-17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of school going children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6-11 years</td>
<td></td>
<td>42.6</td>
<td>52.9</td>
<td>62.2</td>
<td>78.5</td>
<td>92.2</td>
<td>84</td>
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<tr>
<td>11-14 years</td>
<td></td>
<td>12.7</td>
<td>16.5</td>
<td>22.5</td>
<td>32.2</td>
<td>47.4</td>
<td>154</td>
</tr>
<tr>
<td>14-17 years</td>
<td></td>
<td>5.8</td>
<td>7.8</td>
<td>11.7</td>
<td>17.8</td>
<td>22.1</td>
<td>207</td>
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<tr>
<td>Technical students degree</td>
<td>000 nos.</td>
<td>4.1</td>
<td>5.9</td>
<td>13.8</td>
<td>24.7</td>
<td>30</td>
<td>502</td>
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<tr>
<td>diploma</td>
<td>000 nos.</td>
<td>5.9</td>
<td>10.5</td>
<td>25.8</td>
<td>49.9</td>
<td>68.0</td>
<td>683</td>
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<tr>
<td>Hospital beds</td>
<td>000 nos.</td>
<td>113</td>
<td>125</td>
<td>186</td>
<td>240</td>
<td>300</td>
<td>112</td>
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<tr>
<td>Family planning centres</td>
<td>Numbers</td>
<td>—</td>
<td>147</td>
<td>1649</td>
<td>11474</td>
<td>48405</td>
<td>—</td>
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<tr>
<td>Practising doctors</td>
<td>000 nos.</td>
<td>56</td>
<td>65.9</td>
<td>70</td>
<td>86</td>
<td>131</td>
<td>54</td>
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Source: Fourth Five Year Plan, A Draft Outline. Figures of 1966 are approximate while those of 1971, the targets, are subject to revision.
CHAPTER 10

ECONOMIC DEVELOPMENT AND STRENGTH

Indian planning has a philosophy, a strategy and programmes. The programmes are massive as well as detailed. In a vast country like India, with its myriad efforts enlivened by a host of powerful impulses, there is much more to development than programmes would show; nevertheless they do throw light on the theme under consideration, the theme of power.

Broadly, the theme is threefold: the promotion of general welfare and consequent moral and material strength; the assurance of national security and a respectable position in the international sphere; and the preservation of the main political and social values.

From every angle—advancement of the people, national income, industry, defence, foreign policy, ideology—agriculture is the cornerstone of all programmes. It has in fact been stepped up by all possible methods, ideas, technical devices and administrative machinery, some of a revolutionary character for India. In the process of doing so, rural life has been subject to transformations as well as shocks. Reforms have come but so have conflict and resistance, which have to be kept under control.

In agriculture, food production has increased while irrigation facilities, fertilizer supply, and improved cultivation have all ad-
vanced impressively. And yet large quantities of foodgrains have to be imported. Besides, the basic problem remains, which is that on the average an Indian gets no more than two-thirds of the normal nourishment, while there are millions who keep hungry. How to make up for this gap and at the same time how to cater for the rising population is the agricultural problem.¹ The development programmes must find a quick, effective answer to this.

There are five principal fields of industry.

In the first are consumer goods and light industrial products, such as bicycles, sewing machines, plastics, paints, soap, fans, pumps, electrical and rubber articles, and agricultural implements. Considering that on becoming independent India could not turn out a good tooth brush, the progress has been phenomenal.

But it is not enough. There are far more consumers now than in the past, so that demands tend to gallop ahead of supplies. Then prices soar and in turn press down upon consumers, particularly the poorer classes. Thus there comes into being the vicious circle of supply, demand and prices, resembling a snake which turns round and round in order to bite its own tail. The rise of population also increases demands, thereby diminishing savings and investment and retarding economic growth.

Mighty stresses and dangers of mass discontent are inherent in this situation. The problem here is not only of the pace of development as of population and consumption.

In the second field there are the basic materials of industry, such as iron and steel, ferro-manganese, aluminium, non-ferrous metals, chemicals, rubber, alcohol, and plywood. India has begun to produce these in sizeable quantities. However, production must increase rapidly to meet the demands of the expanding industrial complex, and it must also provide for superior quality and finish.

In the third field are impressive manufactures like locomotives, wagons and coaches, commercial vehicles, jeeps and motor cars. There is "self-sufficiency" of a sort in respect of these, in the sense that India can build them mostly itself, but in fact dependence upon external collaboration is still there.

India's major effort has now to be directed to the remaining two fields wherein are made machines to build machines and arms

¹ It is of course not a problem peculiar to India. Many countries of the world in every continent are in a similar situation.
and armament. Plants have been set up for heavy engineering machinery, heavy electrical machines, and high pressure boilers, as also for separation of uranium, thorium and plutonium. Machinery for cement, textile, sugar, paper and rice-making plants is also being built; but considerable leeway has to be made to improve their indigenous content. In regard to military equipment, India has yet to produce a major weapon of war on its own, apart from tanks and an interceptor aircraft, which again are dependent upon foreign collaboration.

In these fields of industry, which hold the key to national power, India’s multifarious capabilities are being tested—the capabilities to turn out qualified administrators and engineers, to produce plans and execute projects, and to co-ordinate the various industrial enterprises. Here too is visible India’s inescapable dependence upon outside assistance in respect of skill, designs, consultancy, special raw material, components, machines, experts and foreign exchange. India’s research laboratories are just about stirring up. Here, if anywhere, lies the country’s Achilles heel.

The pattern of industrial advance is clear enough. It is bound to be based upon “mixed economy”, wherein the Boeing and the bullock cart co-exist and giant plants grow along with industrial estates of small entrepreneurs, small workshops of individuals, and cottage industries in the countryside.

In this vast vista of development costing yearly thousands of millions of rupees, engaging millions of people, and affecting every aspect of national life one notices striking contradictions.

There are the planners who say that since Independence India has increased national income by one half and investment by three times. The countryside is bristling with new life. There are tall chimneys belching clouds of smoke and small industrial estates have been established in every district of the country ringing with the clang and clatter of machines. Food production has gone up by 62 per cent, steel by 342 per cent and generated electricity by 454 per cent. As against 15 per cent in 1947, 30 per cent of India’s population can now read and write, while 8 out of 10 children in the age group 6—11 are at school. Today men expect to live 18 years longer than in the past and die 10 per thousand less.

But even so the average income per capita is about one rupee a day, and for millions only one half or one-fourth of it; no signi-
ficant rise is visualized even in the 1970s. The new life of the countryside does not yet mean a much better life. The industrial sector is pock-marked with pitfalls, facing shortage of finance and skill and in many respects heavily dependent upon outside aid. In a country which has been short of houses for centuries, where a room is shared—if there is a room—by 2 to 6 persons, there is added a further shortage of 8 million houses. Today 300 million men and women are illiterate and at least 12 million are unemployed and many more are under-employed.

A proverb is no proverb to you, says Keats, till life has illustrated it. And ideologies, plans, programmes and statistics are meaningless to tens of millions of people if life does not illustrate them.

How has this development promoted national security and interests in the international arena of power? Till the Chinese attacked in 1962, national defence and economic development remained apart. The two budgets, the two industries, the two administrations were separate, and hardly if ever were they sought to be interlinked. The private sector, which catered for half the development programmes, contributed little to defence. Not one of the Five Year Plans took into account the requirements of planned defence. Physically as well as psychologically defence remained outside the articulate national effort for advancement and was confined to a small body of high-level functionaries, some as obsolescent as the equipment they handled. In this lay a part of the answer to reverses on the northern border and the loss of territory to Pakistan and China.

Since 1962, "defence and development" have begun to hang together, but meanwhile there has been a steep rise in the defence budget. The burden of this has fallen on all and sundry, who begin to question the efficiency of a government which, instead of spreading the burden prudently over the past many years, piles it on their back overnight. It is certain that the dovetailing of development and defence will be taxing and painful and will take long, for it involves the rehash of a deeply entrenched administration. It also involves the principle whether in democracy it is wise to disperse the elements of military power.

But the defence industry will in any case have to shed some of its exclusiveness and seclusions and lay greater trust in private
entrepreneurs. It links not only with total national resources but also with major programmes of metallurgy, electronics, research, transport etc. will have to be real. A good deal will depend upon aid from friendly countries, for defence industry needs advanced technique of a high order more than any other industry.

A nation creates an international image for itself by its methods as well as results. Both are important, but a communist would not mind using the instrument of force where a liberal democrat would insist on using the instrument of consent. May not one say, even at the risk of appearing Machiavellian, that judged by power politics, achievements impress more than methods—there is no other explanation why Russia, with its record of aggressive expansionism and bloody revolution, has come to be looked upon as respectable.

In India, methods appear to impress more than achievements. Democracy and socialism have elicited praise, but they must also generate sufficient stability and strength. The questions asked are whether our system is not over-rated, whether the rate of progress is good and fast, whether leadership is efficient and capable of being effective at the higher levels of power relations.

Many of us wish to compare India with other countries in terms of the output of core elements, rates of growth and development of welfare, but know that comparisons of this nature are unfair. What countries should be chosen? One cannot pit India against the USA or the USSR, for these countries are too advanced, nor against some African states which are too backward. What period of comparison should be chosen—the contemporary era or some era of the past when the countries concerned were in about the same condition of growth as India today? In all such assessments figures and statistics are liable to be unreliable and in some cases just not available.

Nevertheless, let us see roughly how India stands in comparison with the United States. We shall take the year 1961, when India began its Third Five Year Plan. Figures for purposes of comparison have been taken from the United Nations World Economic Surveys and Statistical Year Books. Assuming that 1961 marks the stage of “take-off”, to use Rostow’s terminology, then in that year India was 120 years behind the United States. In 1961, America’s national income was 15 times and per capita in-
come 37 times as large as India's. The USA produced 22 times more crude steel than India and 50 times more petroleum products. America's installed electrical capacity was 40 times as large. Both in the USA and India there were "poor" people, but the standards of poverty varied strikingly. Roughly, they called it poor in the United States when on the average an American earned in a month what an Indian earned in a year.

In contrast with other developed countries falling in a lower category compared to the United States, such as Russia and the nations of Europe, India stands more favourably, and yet is far behind. Clearly, unless there is a revolutionary breakthrough, India has little chance of attaining a comparable stature in material terms in the foreseeable future. In the international balance it is contrast more than achievement which shows the dimensions of the task ahead.

We may remember the dialogue in *Alice Through the Looking Glass*:

"Well, in our country", said Alice, still panting a little, "you would generally get to somewhere else—if you run very fast for a long time, as we have been doing."

"A slow sort of country!" said the Queen, "Now, here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that."

The little Alices of modern India ought to know this.

What impact does development have on India's political and social ideas? It will be remembered that India has adopted democracy which lays down the path, and socialism which lays down the purpose.

Indian development has taken place under parliamentary democracy. It has been in the hands of leaders who have been freely elected by a great mass of people. These leaders have sought to implement programmes by discussion with the people and with their participation and consent. The people have been given, and have exercised, the freedom of thought, expression and choice. During the period of development democracy has been practised in India as it has been done in the most advanced democratic countries.
But we have noticed the strains upon the system. Its very basis has been questioned. Some vital elements in India’s economic advance are, the quality of central control, inter-State relations, and leadership, which are in the melting pot. Fundamental rights, the fulcrum of democracy, are under fire in India as elsewhere; and there is a gulf between rights and duties. The question is much bigger than what India has achieved; it is that it has to achieve much more. To achieve much more, greater co-ordination and firmness in the exercise of power and a deeper consensus among the people are required. Development programmes have to be more fertile so that the system under which they are undertaken, that is, liberal democracy, is deemed worthwhile both ideologically and materially.

Indian socialism has fervour, urge and fire; it is infinitely more than a concept or a definition, it is a dream dreamt by millions. Theoreticians, planners and statisticians alone can neither explain nor make it acceptable for there is a much simpler and more concrete way of understanding it, and this the masses know. They know that the gross poverty and grave disparities must go. The economic programmes launched under the Plans would have to be much more productive and dynamic in terms of India’s socialist ideals.

Freedom and the vistas opened by it have given rise to a whole mass of stirrings and ambitions among the people, which are by themselves the generators of power. This power is like that of the aircraft engine. If too much, it can split the aircraft into pieces but if modulated it can give it jet speed. What India is looking for is jet speed.
CHAPTER 11

THE MILITARY LEGACY OF THE BRITISH

India’s military system is founded in the British times. The story of the Indian army goes back to three and a half centuries, originating from a garrison of the East India Company which guarded the Isle of Bombay. About the same time the Indian Navy was also founded, when the East India Company set foot in Surat. Only the Indian Air Force was formed recently, in 1933. It is not intended in this chapter to trace the development of these Services, their employment by the British and their contribution to build and sustain the British empire. But something must be said about the military legacy of the British, which has influenced deeply the character, shape and equipment of the Indian armed forces and the task of defence which independent India has had to face.

1. POSITION ON INDEPENDENCE

As the chronicler\(^1\) describes from official documents, when the Second World War ended in 1945, the strength of the Indian

Army was 2,000,000 and of the Royal Indian Air Force and the Royal Indian Navy was 30,000 each, excluding civilians. Demobilization was then the order of the day, and the speed with which it happened showed that the Government of India, like other Governments, wanted to get rid of soldiers as quickly as it had got hold of them. In July 1947, the Army numbered 440,000, the Air Force remained at its 1945 level and the Navy came down to 15,000.

Discussions also took place over the future strength and pattern of the Defence Services. Committees were appointed, political directives were sought, some old papers on the subject were rigged up and submitted, and new appreciations were got ready. But not even the most knowledgeable and far-seeing people could have visualized that within two years of the cessation of hostilities India would become independent and be partitioned.

On partition the division of military assets was as lawless as the division of the sub-continent. So far as the personnel were concerned, Muslims could opt for Pakistan, if they wanted to, and they did so, almost wholesale. So far as weapons and equipment were concerned, a ratio of 2:1 as the basis of division between India and Pakistan was adopted, but could not be fully implemented in practice. So far as the fixed assets were concerned, such as ordnance factories, no arithmetical formula could be devised to determine the respective shares of the two states. When, however, the division was completed the picture was as shown on page 213.

Geography and religion were the basis of division of the sub-continent, and yet this basis could not divide the Army, Navy and Air Force into units operationally plausible or complete. Some units were left with too few personnel, others with too little equipment, and most of them had to be re-organized or replenished in order to be combatant. Withdrawal of the British left both the countries without imperial props and face to face with the problem of defence with indigenous resources. There was little if any idea of what the resources were.

Militarily, this is how India began its career of Independence.

2. BRITISH METHODS OF RECRUITMENT

Through experience and for political expediency the British hit
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upon a special method to pick up their men for the armed forces. Population was divided into martial and non-martial classes, and in general this distinction determined the composition of the forces from the last quarter of the nineteenth century.

By this system good fighting material came from the Punjabi Muslims, Sikhs, Gurkhas, Jats, Pathans, Rajputs, and Garhwalis. This represented a cross-section of three important communities of India—Hindus, Sikhs and Muslims—and looked reasonable. But out of these communities only special castes were chosen, and again these castes were by and large from residents of a particular region of India. The British Simon Commission which visited India in 1928 found that 58.5 per cent of the army was from the Punjab, North-Western Frontier Province, and Kashmir, and 22 per cent from Garhwal and Nepal. That did not leave much for the remaining three-fourths of the country. In this army there were no Muslims from Uttar Pradesh and Madras, and no Tamilians from the South. Marathas constituted practically the sole representatives of Central India and they were 5.3 per cent of the total.

By this method, the British further underlined the casteist character of the soldierly class, precluded vast sectors of the popula-
tion from participating in national defence, and introduced communalism in military service.

But their research into recruiting material had another aspect which is instructive.

One Captain E. K. Molesworth thought the surest means of finding out the best men was to observe them carefully in service, on the march, in camp, at their work, in hospital. "The chief points to look at in a man proposed for enlistments are his feet, which should not be flat; his legs, which should be fairly straight and not knock-kneed; his fists, which should be large; his chest, which should also be large, a narrow-chested man being useless; his spine, which should be straight; his eyes, which are a fairly reliable index of his intelligence. . . . Even the best Madrasi recruits fall away in the leg; and below the waist they compare very unfavourably with a Gurkha. They are not hillmen, but on fairly level ground they are second to none in marching."

Another Col. R. H. Firth, an army doctor, analysed 5,676 cases consisting of Sikhs, Pathans, Muslims from Punjab, U.P. and South India, Rajputs, Garhwalis, Gurkhas and miscellaneous Madrasis and applied to them the following formula of a French surgeon:

$$F = H - (C + W)$$

where $F$ is the factor determining quality, $H$, the height in cm, $C$, the chest in cm maximum expiration, and $W$, the weight in kilogrammes. The larger is $H$ over $C + W$, the larger the factor $F$ and the poorer the man's physique; that is, the tall and lean are less suitable than the short and stout. After drawing his measurements carefully and determining the factors, Col. Firth announced that class groups from Hazara, Pathans, Baluchis, Sikhs, Punjabis, Gurkhas and Garhwalis were as good as German groups.\(^2\)

British experience of mass recruitment is also instructive. Both the wars showed that a large population does not necessarily produce a large armed force. The Indian contribution to the Second World War of 2½ million men was gigantic, but during the same period the United States with one-half the Indian population raised 12 million and Britain with one-eighth the Indian population raised

\(^2\) *Journal of the United Service Institution of India*, 1913, p. 125.
5 million. In the case of India, it was also found that after a level of 1½ million had been touched, wastages were rampant.

Mechanization of armed forces demanded a high level of intelligence and technical ability on the part of recruits; thus recruitment was tied up with education. Since education was unevenly distributed in the country, there arose imbalances in the regional distribution of recruitment. Throughout the war there was a shortage of youth for officer ranks, because the youth having the requisite background of competence and leadership came from the middle classes, and the middle classes were hostile to the British. This underlined the political aspect of recruitment.

3. WEAPONS AND EQUIPMENT

During British times, poverty of weapons was a standing grievance of the Indian Army, when only a small component of it stationed on the north-west frontier was properly equipped. This tradition hung on, for during the war the quality and quantity of equipment supplied to the Indian forces was never a strong point of the planning and provisioning staff.

For at least three years after the commencement of the war the forces were starved of equipment. By the end of 1939 the Indian Air Force had at least one flight which had no aircraft. About this time the 4th Indian Infantry Division was formed of two brigades, neither of which had modern equipment nor motor vehicles nor trained drivers. Its men had never seen a mortar or an anti-tank rifle and officers had never handled either. In 1941 Air Officer Commanding-in-Chief, India, reported that “there are no modern aircraft in India, either fighters or bombers, nor are there sufficient obsolete types for training. Afghanistan, Iran, Turkey, Thailand and formerly Iraq, all fifth-rate powers, have superior type of aircraft to India, many of them supplied by Great Britain”. The Indian forces which appeared on the Burma front were under-manned and under-equipped.

Industry for the production of vital weapons of war was concentrated almost wholly outside India, in the U.S.A., Britain, Canada, Australia and elsewhere. Supplies depended upon ship-

ping, the state of submarine danger, and priority allotted by the Allied High Command. After its arrival there used to be a scramble for equipment and normally Indian troops got the second or third-rate. For instance, a usual way of equipping the Indian Air Force was to get hold of the throwaways of the Royal Air Force; the Spitfire came after three years of its use in Britain and the Mosquito, then a latest fighter, did not come to the IAF at all. Ships for the Indian Navy were of the elementary kind and could not by themselves form a fighting service. On the termination of the war India manufactured no principal weapon of war—ships, tanks or aircraft—and possessed only very rudimentary technical skill pertaining to military equipment.

4. WAR EXPERIENCE OF INDIANS

Comparatively, Indian experience of war was of a limited character. It is true the Indian forces were deployed in many roles and in many theatres of war: the Army in North Africa, the Middle East, Europe, Hong Kong, Malaya and Burma, the deserts of North Africa and the borders of Abyssinia and the plains of the Sudan; the Navy in the Indian Ocean and Atlantic Ocean; the Air Force in Burma. But the limitations of experience arose from the Indians handling only the more elementary type of arms, from the range and depth of their training which was by and large below the mark, and from two other important deficiencies.

Even though one is accustomed to the nomenclatures of Indian Divisions, Royal Indian Navy, Royal Indian Air Force and a crop of subsidiary Indian units, the fact was that these were far from wholly Indian. For instance, in the 4th Indian Infantry Division nearly all the officers were British and there was a British battalion in each of the three brigades. There was at least one squadron of the Royal Indian Air Force which had personnel from practically every Commonwealth country. Winston Churchill never forgot to make a mention of the British component in Indian-named formations, whenever the Germans challenged him with the taunt that he was spilling foreign blood to defend the British empire. Field Marshal Sir William Slim, commander of the Fourteenth Army who fought in the re-conquest of Burma, praised his Indian divisions and wondered why one to two-thirds of an Indian Army should have been British.
In these formations, so far as the higher commissioned ranks, the more commanding positions, the key appointments were concerned, they were all filled by the British. It is true that Indian officer cadre expanded during the war in a big way. But it comprised junior ranks and expanded horizontally, not vertically. At the end of the war there was no officer in the Air Force with more than 12 years’ experience and even less in the Navy; the highest rank attained by an Indian in the Army was that of a brigadier. Indian leadership was thus conversant with only the lower rungs of military organization and was not mature.

In the big mass formations deployed in war the strength of Indian units was proportionately small. For instance during the Burma campaign of 1943, Indian units in six division strength participated, but there were an equivalent of fourteen other Allied divisions in that campaign, backed by seven Chinese divisions, a cruiser squadron, a submarine flotilla, coastal forces and escort vessels, and a coverage of 600 aircraft. Here was a mighty assembly of troops and grand strategy in action, but in the build-up of this strategy Indians had no hand. In fact, throughout the war there was little strategic experience available to Indians.

The nearest an Indian came to a position of direction and control of war was when, to placate the nationalist opinion in the country, an Indian member of Viceroy’s Council was associated with defence in 1942. But hardly had he taken over when defence was split into War Department and Defence Department. War Department, headed by the Commander-in-Chief, dealt with the major aspects of war. Defence Department dealt with canteens, cantonments, stationery, and the Indian Army List, and this was under the Indian member. From this position the Indian member learnt as much of real war as a scientist can learn about men from fossils.

A war fought for six years by Indians, to which India sent 2¼ million men, did not give India much experience in leadership, training in staff work, or a hand in the control and direction of armed forces.

5. DEFENCE ORGANIZATION AND STRATEGY

The British left India with a three-pronged defence organization in which the Army, Navy and Air Force became autonomous Ser-
vices. The structure of high command, the chain of control and command in the Services, branches and trades, ranks and uniforms, most of the Service law and codes of discipline were from the British. British also was what may be broadly described as the culture of the armed forces, with the trail of English language blazing through it. English was the key which unlocked the gates of the defence citadel, provided the channels of communication between units, between the leader and the led, and between men of different regions of the country; and in English there was the entire literature on technical affairs and strategy. Etiquettes of the mess with English flavour were adopted. A typical convention by which officer ranks were considered conspicuously superior to the other ranks was borrowed by the Indians. Above all there was laid the foundation of the tradition of military authority being subservient to political authority.

But of profounder significance and of more far-reaching influence than anything the British left was their defence strategy relating to India. The essence of this strategy was their concentration on the north-western part of the long northern frontier to the neglect of the rest.

It is true that, strictly speaking, the British never considered the northern mountain mass as impregnable. The broad conception was that the control of the entire southern flank of the Himalaya was necessary for India's security. The British forces marched into the mountain valleys which overlook India, occupied some of them, such as Himachal Pradesh, and dominated others, such as Nepal. They also forced themselves into Tibet, neutralized it against China and converted it into a buffer between India and Central Asia. To the north-east the McMahon Line was established, which might also have been demarcated but for the intervention of the First World War.

And yet in British days frontier meant the north-west frontier. It was here, as nowhere else, that there lay the frightful incubus of past invasions and prevailing Russian designs. Straddling 1,200 miles from the Pamirs to the shores of the Arabian Sea, the 26,000 square miles of this region also contained 3 1/3 million tribal population, the eternal rebels against the life of peace and foreign domination. These tribesmen posed an endless defence problem, never resolved.
To guard the north-west became a habit, and not a bad habit at that; only it excluded almost completely the rest of the frontier. As Compton Mackenzie has pointed out, "the elaborate and detailed programme for the raising of units; the order of battle; war establishments; scales and types of transport; equipment; and training were all principally arranged with a view to operations in the West of India", and little had been done to meet a determined attack from other directions.

A grave drawback lay in the state of communications in the north-east. When the Japanese attacked, the Brahmaputra River which divides Assam from the rest of India, had no bridge. To the east of the river there was a single-line, metre-gauge railway with a small engine and without modern control system. There was no all-weather road from the west to the bank of the Brahmaputra; the ferry at Gauhati had limited capacity. And only a single-line metre-gauge railway led to Chittagong. Against a massive Japanese attack the logistics of Bengal-Assam were primitive and paltry.

But as the war progressed, the Americans and the British improved the logistics of the area by constructing additional roads, a large number of air strips, and a pipeline between Kunming and Calcutta. Supplies were rushed over the Ledo road and flown over the hump of the Himalaya.

The Second World War opened the way for a comprehensive frontier outlook for which the British did prepare the ground, but such was the force of habit that even after the calamities of Assam and Bengal, it was the nightmare of the north-west which haunted Indian imagination after Independence. Only another invasion, by China, launched in 1962, gave the strategy of the north its correct perspective and dimensions.

The war in Assam however did teach that the north-eastern frontier of India could be breached. It also showed an air approach to China. Here too was evolved, for the first time so far as India was concerned, the code of jungle warfare. This code was issued to all ranks by the Indian Intelligence School, and is quoted below as an example of what the military is expected to do in jungle fighting, as a specimen of the training lessons from the British days, and as a sample of the pithy, powerful language of the soldier.
The code of social intercourse in the jungle is simple. Your chief concern is not to endanger your comrade. Because of the risk that you may bring him, you do not light fires after sunset, nor shoot in the dark, giving away your position. You do not leave any mess behind that will breed flies. You do not ask him to convey your messages, unless it is his job to do so.

You always tell your comrade of any private mask you may have left on any particular trail, or any outstanding feature that may help him to find and keep to the difficult and tortuous paths he will have to traverse. You do not drink deeply of any man's bottle, for it may not be replenished. You tell him of any spring or waterhole which may be near, but hidden from the trail. You share any superior knowledge you may have of what can be eaten with safety from that particular forest, and where it may be found. Who knows? It may save his life. You make sure that he has many before you take his cigarette. You do not borrow from him. You do not ask or volunteer information beyond your job or his job, for idle talk kills men. You do not grouse unduly except, of course, concerning the folly of your own commander; you criticize no other man's commander.

Of these things which you do, the first is to be hospitable, and the second is to be courteous. The day is short in the heavy jungle, but the night is long and sorely tries the nerves of those unused to it. There is time to be helpful to those who share your adventure. If you are one who can keep the spirits of others high, spare no effort to do so. The goodmannered guest transacts his business expeditiously, gossips shop for a little, and is gone.

The man with the sharpest senses lives the longest in the jungle. If your companion's senses are blunt, keep them still and use yours for him; you may thus prolong his life and yours. Make friends with the local population. Even if you are clever, remember always you have much to learn from the man who is jungle-bred.

The code is the sum of fellowship in the jungle. It knows no rank, nor any exception.4

CHAPTER 12

FREE INDIA AND GUIDELINES OF MILITARY POWER

The British military system as described in the preceding chapter appears precariously dishevelled. That is from the Indian point of view. But it was never built for the benefit of Indians. In fact it was part of a total defence complex, in which the Indian forces figured as a small unit of the mighty, widely deployed British military power. If Indians did not get good weapons, training, positions or facilities to become militarily up-to-date, the reason is of course that such things are not a part of the imperial function. The British were there to rule and not to build a strong Indian nation that would destroy their rule.

From the British point of view the system had in fact all the merit needed. In its wide sweep it responded to Britain’s ideal of global strategy. It was thorough and efficient, true to the genius of the British. It took into account the geopolitical factors of the era. And it succeeded well, for India remained almost wholly secure even during the Second World War, the greatest war of history.

India is now confronted with new situations to which the military power has to be related. Here again, as in the case of the British, the character of the people and the geographical, politi-
cal and technological factors will be important. These are briefly described.

1. INDIAN GENIUS

India’s military power will be developed, first and foremost, in accordance with India’s genius. Here one should be careful, for “genius” is difficult to define and equally difficult to relate to the strivings of the people. Some say it is natural and others say it is cultivated, being nothing more than an infinite capacity for taking pains. But it has its peculiarities from people to people, and that is why Indians differ from the British, the Japanese or the Egyptians. There does exist some such thing as an Indian cast of mind, and that creates a typical outlook on military affairs. Some light has already been thrown on this outlook in the preceding chapters.

Scanning India’s past, one cannot fail to observe that Indians have had their share of militarism and wars. Aryans fought as much as they sang and thought their way through the subcontinent. Indian kings maintained armies, formulated military theories, devised weapons, fought ceaselessly among themselves as well as against foreign invaders, and were no less ambitious than the royalties of other lands in regard to the acquisition of wealth and territory by the force of arms. Having been soldiers themselves, Indians have also conceived of their gods as soldiers who rejoice in conquests, have sung about warrior heroes, and have even looked upon the battlefield as a site for the consummation of spiritual aspirations. Arms, as well as ideas, are woven in the fabric of Indian civilization.

But some characteristic aspects of India’s military power are unmistakable. For most of its known history, this power has operated within the sub-continent and been seldom carried beyond the natural frontiers of mountains in the north and sea in the south. Soldiering has always been the profession of a very small fraction of people. It has been a matter of caste, of the Hindu type, Muslim type or British type, which till recently automatically excluded more than three-fourths of the population from the profession of arms. On the warlike ambitions of ancient Indian kings, strict curbs were placed involving moral and religious sanc-
tions. Sages and philosophers have arisen from age to age preaching the unity in God’s creation and the brotherhood between man and man, which ought not to be subjected to the sacrilege of destruction. Killing has been regarded as a sin and non-violence a virtue by millions of people.

Almost from the beginning of the Indian civilization 3,500 years ago, anti-militarism became a part of religious practice, and temples rather than battlefields have embodied the most exalted aspirations of the human race. To millions of Indians the cult of non-violence is worshipful. This has often emasculated them, where it has not rendered them prevaricating and inhibited over issues involving bloodshed. It is not that they do not realize the necessity of force in the scheme of survival. But other compulsions press in, and when it is a question of choice between force and these compulsions, the answer is unmistakable.

The great dichotomy between force and non-force remains, and in modern times many have looked upon Gandhi for its resolution. Out of the three major wars which confronted him in the twentieth century he participated, howsoever nominally, in two.¹ And yet all his life he spoke about non-violence and spiritual power. In his pamphlet *Hind Swaraj*, when told that world history was a record of wars, he said it was not, because it was only a record of murderous kings whose doings were no evidence of the efficacy of soul force: “You cannot expect silver ore in a tin mine.”

Gandhi did not resolve the dichotomy of physical force and soul force. Fourteen years after his death, Vinoba Bhave, the great remnant of Gandhi, was faced with it again when China marched into India. Military strength was necessary, he said, but so was non-violence. “The more the military strength is developed the more will non-violence be squeezed out,” he warned, and added, “The last claim of non-violence is that it can face the enemy without an army.”

One is not surprised if this train of thought impregnates all fields of national endeavour, the social and economic preferences, non-alignments and panchsheel, philosophy of weapons and strength of forces. By this national trait, a world in which armies

¹ In the Boer War he raised a relief corps which, headed by him, went to the firing line. In World War I, he raised an ambulance brigade and encouraged recruitment.
stamp upon the earth, bugles blow, guns boom and generals strut about is hardly an Indian’s world.

To the people of a world such as this nothing is more suitable than democracy. The spirit and form of the Constitution which was selected after Independence is in tune with the Indian genius in this respect. By it bloody violence and upsurge are sought to be shunned and decisions by the force of arms are evaded. This Constitution trusts in mild and slow processes of governance, which always stand in the way of building up military power. Having begun with democracy, Indians have the urge to make it a success and are liable to be influenced by flamboyant democratic conceptions prevailing elsewhere in apparently successful democracies. Quite often, in the flush of idealism, they may overlook the role of military power in sustaining democracy. Abraham Lincoln may have been right in saying that ballot is stronger than bullet, and yet American ballot has created more bullets than were ever created by all the nations put together in the past.

Under the Constitution that India has erected, it is not easy to build military power. The responsibility is that of Parliament, that is, the executive and the two houses of legislature. Being a large body and confronted with a multitude of problems, it has to be militarily well-informed, sensitive and alert to the main problems of national security before it can be expected to discharge its responsibility effectively. Should that not be the case, the responsibility falls almost wholly upon the executive, and in democracy the executive is proverbially multi-minded, lethargic and spineless unless prodded all the time.

Partly as a result of tradition and partly because of democratic ideals, there are bound to be hesitations and qualms in regard to the ways and means of generating military power. The conflict between the brass hat and the top hat, for instance, is almost inevitable. Equally inevitable is a long time-lag in establishing the desirable patterns of relationship between the soldier class and the civilian class, between military institutions and civilian institutions and even between officers and men in the armed forces. Until this happens, military power will not be integrated in national life, a condition fraught with two-fold dangers. These dangers are of opposite character.

Because of the conflict, military power is liable to become feeble
and ineffective. Because again of the conflict, it can get out of hand and lead to military dictatorship. In the latter case, the difficulty is that nowadays the soldier is professional but not only professional, while the statesman is political but not only political; and unless there is a correct understanding between the two and adherence to basic values, they will be jockeying for the same position. That is the danger of immature democracy.

How will Indian genius react to the violence and militarism of modern times? This cannot be answered in terms of military budgets and professional armies alone, as it concerns the whole people. The people may remain impassive and the nation may suffer. Under persistent powerful pressures, they may rise in a spurt of rage. Or they may bring their own pacific wisdom to bear upon the world’s wisdom and shun wars. The question is still open.

2. **Influence of Geography**

Next to the ingrained characteristics of the people, the physical environment in which they live influences military power. This is very largely a question of geography, which must take into account the extra-territorial regions, the lands immediately across the borders, and the national territory.

For centuries past, as history shows, India has been a target of invasions whenever disturbances have taken place in regions apparently too distant to be of consequence. These regions have included the Middle East from which came the Persians, Arabs and Afghans; North Asia from which came the Turks, Mongols and Chinese; Europe from which came the Greeks, Portuguese, and British; and the Far East from which came the Japanese. This happened when communications were difficult if not all but impossible, but that no longer holds good. Repercussions of events in one part of the world travel quickly to another, however far-flung. What happens between Europe and Russia, Japan and China, America and Vietnam, and in the Middle East is significant for India. Indian strategist has therefore got to develop a broad mind which can take in its stride movements of a global character having military undertones.

Against this background, India’s immediate concern would be with its neighbours, that is, China, Pakistan, Nepal, Burma, Ceylon and the Indian Ocean.
India faces China, after the latter's occupation of Tibet, along a long mountain frontier. Tibet is closer to India's base of power compared to China's base of power. This is a fact often overlooked, holding out at once possibilities which India has never exploited and dangers to which India has been always subject. Pakistan challenges India at its mountainous north-west which faces Central Asia; has its frontiers in the plains where there are no natural barriers; and, in the east, juts into Indian territory critically enough to be able to break the latter into two parts near the sensitive Tibetan border. Nepal is a marchland between the Tibetan plateau and the Indian plain down the Himalayan slope. Burma's northern border is partly a continuation of the Indo-Tibetan border, and is close to India's North-East, a sensitive sector, which, as the Japanese showed, is not to be considered in isolation from the land mass of Burma and Indo-China. Militarily, Ceylon can be looked upon as the naval base nearest to India. The Indian Ocean, in particular the Arabian Sea and the Bay of Bengal, provides sea approaches to India, is a vital trade channel without which Indian life could be choked to starvation, and contains an important outpost in the Andaman Islands.

Indian history, ancient or modern, has been powerfully influenced by these neighbours, to which therefore military power has to be correlated.

It has also to be correlated to internal geography. India is a large country of over one million sq. miles, very irregularly shaped, so as to be vulnerable from almost every direction. Its security problems thus acquire large dimensions, demanding an armed force of considerable size. The force should be such as to be able to move quickly from one part of the country to another. This would depend as much on its own mobility as on the existence of a well-laid national communication network.

This vast territory lies within a frontier of 13,000 miles, which comprises mountain forms, plain surfaces and sea coasts. This fact has a bearing on the composition of India's land, air and naval forces. The northern frontier is mountainous and has its peculiar military problems posed by terrain, altitude and climate which vary strikingly from place to place. A part of it is not under Indian control, which adds to the difficulties of defending it. As never in the past, this frontier has begun to be breached, again at
the hands of a type of aggressor with whom India is familiar. And yet it still retains a great deal of its credibility in the form of a natural barrier against the north. India is thus interested in the security of its entire length from the Pamir knot to the India-Tibet-Burma junction, which, incidentally, brings into relief the value of the entire territory of Jammu and Kashmir.

Geography also brings into relief India’s vital, vulnerable or sensitive parts. These would include India’s mineral and metal producing areas, the centres of heavy industry and areas of dense population and communication centres.

3. TECHNOLOGY AND ORGANIZATION

India’s military power will bear the stamp of developments in the field of “organized metal and scientific chemicals”, that is, technology. Technology has always promoted weapon-making, but during the last seven centuries its impact has been of a revolutionary character. This began with the invention of gun-powder which was the first modern catalyst of arms, changing warfare beyond recognition. Four more catalysts have since emerged: steam, oil, electronics and atomic power, and a search is going on for more and more of them. With their help, weapons have been acquiring an ever-increasing range of action, greater striking power, better accuracy of aim, larger volume of fire, and superior mobility. Thus, war is waged now over large areas and is fraught with the dangers of global conflagration. It can also be waged in places which were once considered invulnerable or impregnable. Battles are now bloodier and more disastrous.

The first consequence is that the armies want modern weapons. Modern weapons, since 1920, would include aircraft, tanks, lethal gas, missiles and atom bombs. They would also include the advanced versions of the weapons in common use before 1920, that is, rifle, carbine, machine gun, mortar, cannon, torpedo and submarine. But the difficulty is that no modern weapon today remains modern for long, for such are the thrusts of technology in the field of weapon building. Innumerable versions of weapons are afloat all the time, and to choose them well is a matter of discrimination, which is difficult to come by.

What is worse, modern weapons are expensive, often prohibi-
tively so, and difficult to obtain. Indigenous production is well-nigh impossible for most countries and, in any case, needs a powerful industrial base and high technical know-how. India possesses the necessary potential, which however has to be harnessed. This means at least some military reorientation of economic programmes, especially industry. New ordnance factories will have to come into being and old ones renovated to the modern standards of performance and production. While this happens, India would have to make a four-pronged effort to build military power: hasten home production, conduct arms diplomacy for military hardware, make the most competent use of old weapons, and provide for best possible training.

Indian tactics and strategy, very largely the remnant of British times, must now be developed round modern weapons, and military organization round new tactics and strategy. This would affect the composition of top bodies such as the High Command as well as base formations such as the battalion. This would also affect the size, construction and location of all those constituents of military power which make up the infra-structure.

Geography, technology and military ideas will together influence greatly the pattern of India’s military power.

Besides, India is a land power as well as a sea power. Its armed forces must therefore possess a carefully chosen complex of army and naval elements, into which the air component is integrated. It is a big country, and is located in a strategic part of Asia, making available to the world a bridge between the east and the west which the great mass of North Asia denies. Here, therefore, world interests are liable to converge; here too, as a consequence, the Great Powers will try to make their presence felt.

India’s military power cannot therefore be divorced from the military aims and capabilities of the Great Powers in all the three main forms of warfare which have become current: the nuclear, the conventional, and the guerrilla. If India has to develop a military system to embrace all these three forms, an appropriate military philosophy must emerge, the armed forces would have to be accordingly reconstructed, and the nation’s economic base would have to respond to the new demands.

The incorporation of nuclear energy into weapon systems poses presently the newest and most urgent demand. From the point of
view of morality, material benefits and political expediency no country is better poised than India to listen to a thesis on the renunciation of nuclear arms. But the facts of life militate against it. Nuclear weapons have come into being, and there is no instance in history of a weapon which comes into being and is not used. Even assuming that a megaton weapon is too devastating to be used militarily, it will nevertheless be used politically. Nuclear weapons of kiloton power have also been built and will sooner or later easily take their place beside conventional weapons. What India does will depend greatly upon what others do, especially the nuclear powers; and it ought not to be expected to become unilaterally a custodian of the world's nuclear safety.

Military strength would be directly related to material resources. India is a vast country and these resources are enormous. But in view of its developing character, only a fraction of them are available and the remainder are waiting to be exploited. Then, what is available has to be distributed widely to cater for the numerous requirements of a large population which inhabits a vast territory. These requirements have further to be determined on a priority basis, in which food, clothes, houses, education, hospitals and municipal facilities must come on top. The quest for national security, of howsoever overriding an importance in the present day world, is often liable to be submerged in the clamour for the fulfilment of basic needs. For many years to come the tie-up between defence and development will be a matter of paramount importance for all Indian Governments.

The quantitative as well as qualitative character of some of the key industries will thus have an intimate bearing on military power. These industries are concerned with the production of steel, petroleum, power, electronic equipment and a few other things, without which there can be little progress in weapon-making. Good weapons would in turn demand progressive ideas, designing ability, and appropriate processes of development and manufacture.

4. IMPACT OF INTERNATIONAL RELATIONS

Military power is powerfully influenced by international climate. The world may be in a mood of tension or relaxation, of conflicts or compromise. Nations may be grouping together into alliances
for fear or disengaging into national units for lack of fear. There
may be accent on war or on peace, on the building of arms or dis-
armament, on a resort to the battlefield or the conference table.
Even in the midst of peace there may be economic conflicts, a
kind of neo-mercantilism, and ideological conflicts, with national
interests always lurking behind, holding serious potentialities of
a clash of arms. A world which has the minimum sensitive areas,
in which regional stability is easy to work out, and in which the
balance of power can be maintained at the convenience of the
major powers, thinks less in terms of military power and more
in terms of diplomacy. Technology also influences the world cli-
mate, either by proliferating weapons and instigating militarism
or enhancing the power of weapons, causing fear of wars and
downgrading militarism.

This brings in the question of India's foreign relations. Inasmuch
as diplomacy is ineffective without the backing of force
India's military power is tied up with its foreign policy. Foreign
policy objectives are many. They are not constant either, and have
to be framed in the light of national and international develop-
ments. But there are a few basic aims of foreign policy which are
well understood.

First and foremost, it seeks to preserve the integrity of national
frontiers. It seeks to ensure also that there is no interference of
foreign powers in the internal affairs of the state with a view to
foster disruption. Foreign policy has to be so conducted as to
win foreign aid and goodwill for promoting internal strength and
stability. In addition to these more primary objectives, it seeks to
establish influence abroad. Where dangers to national security are
spread over a wide area, it seeks to establish, with the aid of other
powers, strategically useful extra-territorial zones. In the last re-
sort, it employs armed force abroad to promote national interests,
directly or indirectly.

Conditions of the world being as they are, practically none of
these objectives of foreign policy can be achieved without ade-
quate military power. A good many factors would no doubt bear
upon the pursuit of these objectives in conjunction with the back-
ing of force, but the internal condition of the country would be of
overriding importance. In that context, military power in India
would be built in conformity with the three stages of national de-
development; these three stages would also determine the dynamics of its role.

In the first stage, roughly at the stage of take-off, there has to be concentration on moral and material reconstruction at home. There is need for foreign aid, avoidance of energy-wasting conflicts, and climate of peace in the world. Foreign policy would lay stress on disarmament in one shape or the other. The ideal condition would be to keep military power at a low ebb, but this may not be possible because of internal difficulties or external relations especially with neighbouring states. In this situation, the armed forces cannot be very much more than of a defensive nature; and a wise Government would build them up and employ them thoughtfully in their minimum role of safeguarding frontiers.

In the second stage, India has established internal stability and sufficient self-reliance. Backed by its internal strength and resources, it is in a position to rehabilitate itself territorially and render its frontiers firm.

It is only in the third stage, when India possesses sufficient military power and when national frontiers are stable and internal security is unthreatened, that India would have the options of foreign policy in military terms. It can escalate and project military power and thereby do what the Great Powers are doing today, that is, acquire bases, get into the whirl of military aid programmes and enter into military alliances. Or it can hold this power simply as a symbol of deterrent might. Or it can use military power as a prop to build for itself an image of non-aggression and peace in accordance with its traditions and go all out to create conditions in the world in which armies can be disbanded and arms are redundant.
CHAPTER 13

THE ARMED FORCES TODAY

1. ARMY, NAVY, AIR FORCE

The Indian armed forces have been built in accordance with Five Year Defence Plans\(^1\) the first of which envisages:

(a) A well-equipped army with a strength of 825,000 men;
(b) A 45 squadron Air Force;
(c) A phased programme of replacement of over-age ships of the Navy;
(d) Improvement of road communications in the border areas;
(e) Development of the production base;
(f) Improvement in organization.

Recruitment and Training

A remarkably cosmopolitan body, the armed forces take personnel from all communities and from all over the country. Each Service has its recruiting staff who travel within their allotted zones and pick up recruits to fill their allotted quotas. A


232
balanced regional representation is possible by this method. Selection by the principle of "good seeds", as obtaining in the British days, no longer holds good; instead methods carefully worked out by the Psychological Wing of the Ministry of Defence are adopted. They are scientific. But they are not always flexible enough to cater to the great variety of manpower available in the country, in particular, the indigenous population of the mountains, which remains largely untapped for want of suitable technique. A few Scout Battalions have however been raised in the Himalaya.

The other ranks are recruited for varying periods of service, the minimum active service being 10 years for the soldier, 10 years for the sailor and 15 years for the airman, followed in each case by service in the reserve.

Recruitment of the officer class is more sophisticated than the other ranks. Most entrants have first to pass an educational examination conducted by the Union Public Service Commission, which is followed by a test at the Services Selection Board. In certain cases, such as technical graduates, exemptions are granted. The National Cadet Corps is a useful source of ready material for so long as it functions well; so also are the Services which give commissions periodically to personnel of other ranks.

An ingenious method has been adopted to find young disciplined boys for the Services through schools started by the Ministry of Defence, imparting education on public school lines, and primarily meant for the children of Service personnel; there were 15 of them in 1968. In addition to being a welfare measure of great importance, these are a ready source of recruiting material.

In a country of over 500 million people manpower for the armed forces should normally present little problem. There was no conscription in India during the two World Wars or during conflicts with China and Pakistan. The large size and great variety of the country are other advantages, because personnel with diverse qualities and characteristics, matching the variety of military tasks, become available.

But a mere profusion of human beings is not enough. They must also be healthy; more than half the rejections in the armed forces are found to be due to poor health, caused no doubt by malnutrition. They must also have a sound basic education, which is demanded by modern mechanization. In a way the armed for-
ces are a mirror of the state of technology in the nation; therefore, the more and better the Five Year Plans, the superior the manning of the Defence Services.

On the other hand, the Plans have opened fresh avenues of employment in civil administration, industry and commerce, and the military authorities do not find it easy to attract suitable young men in desired numbers. "So far we have got 3,000 officers though we want 8,000", said the Defence Minister to Parliament during the period of emergency after the Chinese attack. The shortage of engineering graduates led to the introduction of a scheme in 1965 by which recruits to the engineering services of the Government are liable to serve in the armed forces for a minimum of 4 years.

Each Service has its own training schools for its other ranks. The instructional period varies with the Service, with the branch of the Service, and with the trade. The minimum period is 5 months, as in the case of the Army Service Corps, but some technical trades take as long as 30 months. But no commander has ever considered the training given in schools to be enough, hence in one form or another it goes on during the first few years after active service commences. There are a large number of courses imparted to the personnel as he makes his way through the Service, and promotion depends upon the successful completion of some of them. And that reminds us of the claim often made by generals, that in peace the army is trained for war.

Because of varying standards, conceivably, no attempt has been made to impart training to other ranks on an inter-Service basis, although in some trades at least this should be possible. In view of the advance of technical education in the country, the technical training periods in the schools could also be cut.

In peace-time it takes around five years to train an officer, although this period is substantially reduced for certain branches, such as the Medical Branch, where university graduates are entertained. At the National Defence Academy, the combined officer training institution for the three Services, training lasts for three years, after which the Army, Navy or Air Force schools take over till the grant of commission.

The Academy is located at Khadakwala, 15 miles from Poona, girdled by hills some of which carry ancient forts, the strongholds
of kings in the days gone by. A couple of miles from the main building is an artificial lake which caters for naval training, while the air currents which rise after beating against the hills are suitable for gliding. Outdoor training is possible throughout the year, as Poona climate is mild and bracing. Academic instruction of undergraduate standard is conducted mainly by civilian lecturers. The Academy, having now a normal capacity for 1,500 cadets, is reckoned as an outstanding achievement of free India.

Among other inter-Service institutions are the Defence Services Staff College which train junior officers for staff work and the National Defence College for instruction in high strategy to the more senior officers. In both the colleges there is a component of students from civil departments. The Land/Air Warfare School is principally for Army and Air Force officers. There is also the Institute of Armament Technology for specialized training and research in armament problems.

Training in foreign countries has been increasingly cut down, partly because of the desire for self-sufficiency, partly to save foreign exchange, and partly because defence institutions abroad do not normally admit foreigners unless there happens to be a bond of military alliance; but it has not been discontinued. In particular, there are courses linked with specific projects, such as flying and construction of Mig aircraft. One hundred and sixty-four officers from the three Services were sent in 1963 for training to Australia, Canada, France, Hong Kong, Japan, Malaya, the UK, the USA, Russia and West Germany, and, in 1965, the IAF had 225 vacancies abroad. Normally, the Defence Services do not send their personnel for study to some of the more advanced institutions at home, as happens to be the case in some countries abroad with commendable results.

The entire training system of the Indian armed forces is based upon the English language. Hindi, even though introduced here and there, has made little impact. Almost all technical trades are taught in English. The nomenclatures are in English. English is the language of most of the instructional literature. The officer class without exception prefers to speak in English in the messes and in the units. Through English is conducted the entire military administration. Presently, language mirrors the British legacy more than anything else.
After reverses at the hands of China in 1962 doubts were cast whether training in the Services was good enough. In explaining the reverses in NEFA to Parliament in 1963, the Defence Minister put his finger on three training lacunae which had to be plugged. First, there had been inadequate toughening and battle inoculation in training; therefore battle schools were to be opened at training centres and formations. Secondly, "the main aspect of training as well as the higher commanders' concept of mountain warfare requires to be put right." And thirdly, "training alone, however, without correct leadership will pay little dividends. Thus the need of the moment, above all else, is training in leadership."

Much on the pattern of Wingate's training camps opened in Gwalior during the last war, schools in jungle warfare have, after the Chinese attack, become an inseparable feature of training organization. So have those for high altitude warfare, the one in Gulmarg, Kashmir happens to be one of the best in Asia. War on the Himalaya demands development of special qualities in the soldier. He should be able to walk 30 or 40 miles a day at a pinch; he should be inured to carrying heavy loads by himself; he should learn how not to get frost-bite; and he should be able to breathe comfortably in high, thin air.

However, a deeper scrutiny of training policy and technique is required than has been done in terms of the NEFA reverses. There have of course to be a sufficient number of schools for the great variety of military tasks. These schools have to be realistically equipped with up-to-date equipment. But apart from this, there is the question of approach to training in nationalistic terms. The entire system is so sophisticated, with its peculiar level of thinking, living and behaviour, that it can hardly conform to the new kind of society India is building. Sophistication is expensive and more often than not rejects measures of economy which, in the developing India, should be increasingly available. The cornerstone of this sophisticated edifice is the English language, which renders training difficult, prolongs instructional courses, produces an exotic class of professional brass-hat, and would never let an overwhelming majority of Indians have opportunities for a military career.
The Army

The Army is divided into five fighting formations, the Armoured Corps, Regiment of Artillery, Corps of Engineers, Corps of Signals, and Infantry, in that order of precedence; and a dozen services, including supply, intelligence, medical facilities, ordnance, electrical and mechanical engineering, and education. For purposes of control and operation they are further grouped into two categories, the static and the mobile.

The static category comprises the Headquarter formations of which the Army Headquarters is the highest, headed by the Chief of Army Staff of the rank of General. It has six branches, under which are a number of directorates. It exercises its authority through Command Headquarters, headed by General Officer Commanding-in-Chief (Lt. General), of which there are four, controlling the Southern Command, Poona; Eastern Command, Calcutta; Central Command, Lucknow; and Western Command, Simla. In addition to carrying out the orders of the Army Headquarters, they are also responsible for the operations, training and administration of the units under them.

The Commands have been formed on geographical rather than functional basis; three out of the four covering the northern half of the country are orientated to the land frontiers from which dangers have emanated since Independence. Under Command Headquarters are Areas and Sub-areas.

Of the active formations, the field army would be the highest, comprising three or four corps, but its strength and composition are not fixed. The corps, under a Lt. General, consists of two to four divisions, which may be infantry divisions, mountain divisions, armoured divisions, or any combination of these divisions. But, again, its composition, like strength, is flexible, depending upon the requirements of the war theatre. Next to the corps is the division, commanded by a Major General; it is the highest single fighting unit of the Army, self-contained in arms and services and having a fixed establishment. Lower down is the brigade, after which the nomenclatures of the sub-units vary: those of the infantry/mountain brigade are battalion, company, platoon; of the armoured brigade are regiment, squadron; and of the artillery brigade are regiment, battery, section.
An infantry division has around 20,000 men. It is divided into three brigades each having three infantry battalions; a regiment of armoured corps having three squadrons; and an artillery brigade, having three field regiments, each of three batteries, one light regiment, and another battery. It is supported by various services as well as an observation post flight and a balloon unit attached from the I.A.F.

A mountain division is smaller than an infantry division by 5,000 to 7,000 men and is patterned to suit mountainous environment which has its special problems of administration, transport and communication. It can operate up to an altitude of 20,000 feet. It is essentially an infantry division but does not have the regiment of armoured corps and the air observation post flight; the artillery component is changed, and animals are introduced as carriers in addition to power-propelled vehicles.

An armoured division is based on an armoured brigade of four regiments, each of four squadrons, constituting its striking power: a lorried infantry brigade; an armoured artillery brigade; and other services, some armoured.

The artillery includes: 7.2 inch heavy howitzer; 105 mm and 75 mm pack howitzer; 120 mm heavy mortar; 100 mm, 5.5 inch and 130 mm medium gun; and 25 pounder field gun. The anti-aircraft artillery consists of 40 mm L-60 and L-70 Bofors. The basic infantry weapon is the 7.62 mm semi-automatic rifle.

The armour includes T-54, T-34, Vijayanta, Centurian, Sherman, Stuart, PT-76 and AMX 13 tanks, as well as armoured cars, recovery vehicles and bridge constructors.

Engineer units, the function of which is to smoothen the movements of own troops and hamper those of the enemy, are of battalion strength assigned to infantry, mountain, or armoured division. They cater for the building of roads and bridges, breaching of minefields and disposal of bombs, and may also be in charge of water supply. The assault units use Churchill tank suitably modified.

The Corps of Signals is responsible for signal communication in the form of wireless, line, and despatch service, and has its units in the army, corps, division and independent brigades. Also, it provides certain limited services to the Navy and the Air Force.

Presently, the Indian Army comprises 12 infantry divisions with
supporting tank requirements, 11 mountain divisions, 1 armoured division with Centurian tanks, and two independent brigades with other tanks. The total strength is about 800,000. This is rather an old style army. Its structure and equipment are almost wholly of the old British pattern, even now when those of the British Army have changed.²

Some new trends may be noted. They are caused both by the introduction of atomic weapons and improvements in conventional weapons. They are also caused by enlargement of the role of conventional weapons.

Leaving aside atomic weapons (of which the 8 inch howitzer, useable in the battlefield, is an example), the trend is to reduce the size of division and simplify the structure of control and command. Of its strength of 20,000, the Indian division has only half of it as combatant, the rest forming the tail. Three brigades in the infantry division under one commander would also appear to be too cumbersome for the requirements of mobility today.

Indian tanks, apart from Vijayanta which will take time to be introduced fully, are mostly from the Second World War, with some modifications. Their speed, range and armament are not of modern standard. A number of artillery weapons, like the 25 pounder are being phased out elsewhere. Apart from acquiring small arms of superior quality, the infantry is increasingly in need of missiles in their anti-tank and anti-aircraft roles.

The emphasis in the more modern armies is on light, easily portable weapons. Tanks, vehicles, heavy guns and missiles are gradually being built so as to be air portable.

Modern armies are making more and more use of tactical air power, comprising strike aircraft, medium transport planes, and helicopters. This brings in the question of the command of tactical air power in support of land forces, whether it should be with the Air Force or with the Army; the trend is towards the latter.

The Navy

The Navy comprises an officer cadre of six Branches, Execu-

tive, Engineering, Electrical, Supply and Secretariat, Instructor, and Medical; the Executive forms the operational sector, whereas the rest provide the services. The sailors are divided into groups, which are further sub-divided into branches in accordance with their professions.

The Chief of Naval Staff, who is of the rank of Admiral, heads the Naval Headquarters, which has four branches and a secretariat. He exercises his command through shore establishments and authorities as well as through the naval forces. The former comprise the Flag Officer Commanding-in-Chief Western Naval Command, Bombay; the Flag Officer Commanding-in-Chief Eastern Naval Command, Vishakhapatnam; the Commodore Commanding, Southern Area, Cochin; and the Naval Officer-in-Charge, Goa. The sea areas surrounding India fall under the first three of these commanders and extend so as to include the Arabian Sea, the Bay of Bengal, and part of the Indian Ocean down to 15°S. Of the naval forces, the principal warships are in the Indian Fleet, headed by Flag Officer Commanding, who is a Rear Admiral, while other ships are placed under the authorities ashore.

A fleet is the highest naval organization, which may be sub-divided in accordance with the task, in which case it comprises task forces, task groups, task units and task elements. Or it may be sub-divided in accordance with types, when it contains flotillas, squadrons, divisions and sub-divisions. A squadron consists of the ships of the same class, e.g. destroyer or frigate, and is of course divisible into smaller units only if the number of ships is large. The Indian Fleet comprises a light aircraft carrier, cruisers, a destroyer squadron, frigate squadrons, and training and repair ships.

The naval aircraft of the aircraft carrier INS Vikrant consist of Hawker Sea-hawk fighter bomber and Breguet Alize anti-submarine aircraft, both carrier borne; Short Sealand amphibian and Fairey Firefly for target towing, both shore-based.

Presently, the Indian Navy consists of one aircraft carrier, one submarine, 2 cruisers, 6 destroyers, 5 anti-aircraft frigates, 3 anti-submarine frigates, 4 coastal minesweepers, and a few other vessels. The strength is 30,000.

Organizationally as well as technically, the Indian Navy is mostly British-based. A good many of the ships, of the Second World
War vintage and refitted for Indian use, belong to the obsolescent class and are increasingly difficult to maintain for lack of spares; spares are available almost wholly from Britain.

To give modern trends, aircraft carriers and submarines which are nuclear-powered and ships fitted with nuclear cannon have come into being. Leaving aside these, in the conventional sphere, the aircraft carrier has come to be a rare weapon, militarily of questionable use and too costly anyway for the benefits it confers; Russia has none although it is building some, and Britain has decided to get rid of it in the 1970s. So long as it lasts, it must have modern aircraft, which the Vikrant does not have. A conspicuous deficiency of the Indian Navy was, till recently, the complete absence of submarine; this has now been partially made up. It also needs oil tankers for ships operating as far away as the Andaman Islands and fast patrol boats for coastal defence.

All modern vessels now demand higher speed and longer range and a complement of more powerful weapons. The size of cruisers is being enlarged to make available surface for helicopters. The frigates and destroyers are carrying missiles, in addition to modern cannon, and helicopters are coming to them also. Ancillary equipment like radar is of better quality.

Of all the three Services, the Indian Navy is the most backward and, by virtue of its small size, least adequate for the naval task.

The Air Force

Officers of the Indian Air Force are placed in General Duties Branch, Technical Branch, Administrative Branch, Equipment Branch, Accountant Branch, Medical Branch, Meteorological Branch and Education Branch. The General Duties Branch provides the flying and operational component, while the rest provide the services. Airmen are placed in six groups of various trades.

Air Headquarters is the topmost formation, headed by Chief of the Air Staff with the rank of Air Chief Marshal. It has four branches, under which are a number of directorates. It exercises its authority through five Command Headquarters, each headed by an Air Officer Commanding-in-Chief of the rank of Air Marshal or Air Vice Marshal. Three of them, Western Air Command
at Delhi, Central Air Command at Calcutta, and Eastern Air Command at Shillong are of operational character, responsible for air defence and air attack within the geographical limits of their command. The operational units under them are provided with a number of selected servicing facilities. The Commands are predominantly orientated to the land frontiers; the Central and Western Air Command also cover India's strategic interests in the Bay of Bengal and the Arabian Sea.

Headquarters Training Command at Bangalore, controlling the fourth Command, is responsible for all ground training and basic air training, while Headquarters Maintenance Command at Nagpur, controlling the fifth Command, is responsible for the storage and repair of equipment.

The sub-divisions of operational Air Commands comprise stations, wings, squadrons and flights. The station normally consists of two or more wings, a wing of two or more squadrons, and a squadron of three flights. The squadron is the frontline fighting unit of the Air Force, mobile and self-contained; its aircraft number 20 on the average.

Along the frontiers are established Tactical Air Centres of the Air Force for support to the Army, usually in direct contact with the Corps Headquarters. These are controlled by Advanced Headquarters, which again are linked with Army formations. An Air Force unit forms a part of the Maritime Headquarters in Bombay.

Presently, the IAF has 3 Canberra bomber squadrons; 3 Ouragans and Vampire fighter-bomber squadrons; one HF-24 Fighter-bomber squadron, 6 Hunter ground-attack squadrons; 12 interceptor squadrons of Mig 21, Mystere IV and Gnat Mark I; 13 transport squadrons of HS-748, C-47, C-119, Otter, Heron, Caribou, II-14 and An 12; 1 Canberra photo-reconnaissance squadron; 6 helicopter squadrons of S-55, Mi-4 Hound, and Alouette 3; 1 Liberator maritime reconnaissance squadron; 6 anti-aircraft artillery regiments; and about 20 squadrons of SA-2 missiles. Russian Su-7B fighter-bombers are on the way, to form three squadrons during 1969. It has a strength of about 85,000.

Compared to the Navy, the weapon system of the IAF is more diversified, being of British, American, Russian, French and Canadian origins. This poses multiple problems of spares and maintenance. A small beginning in indigenous production has been
made, but reliance on outside sources is anticipated in the foreseeable future.

All combat planes, barring HF-24s and Mig 21s, are more than 15 years old and fall in the obsolescent class. So do most of the transport planes, whose carrying capacity is in any case limited. The strike force, confined to Canberras, is much below modern standards from the point of view of range, lethal power and speed. The Su-7B belongs to an old generation of fighter-bomber.

Apart from the nuclear bomb and the bomber which can carry it, the trend, in the conventional field, is for the long-range missile instead of the long-range bomber, medium range missile for strategic purposes, and air-to-air and surface-to-air missiles for tactical use. Modern fighters, interceptors and fighter-bombers are of supersonic speed. Radar stations in aid of air defence are being established in increasing numbers with up-to-date equipment.

In Schedule IV are given some statistics of weapons.

2. HIGHER DIRECTION AND CONTROL OF THE ARMED FORCES

As noticed in Chapter VI, defence falls in the Union list of subjects and is the responsibility of Parliament. The President is Parliament's agent and is designated as supreme commander. Although he does not exercise command at present—but there is nothing in the Constitution which forbids him to do so—he must nevertheless appear in the hierarchy of direction and control. Thus the Indian High Command may be depicted as shown on page 244.

In this set up the Cabinet is the agency to execute the supreme command of the President. Normally, it has a cell for this purpose. The Defence Committee of the Cabinet, which formed the cell for many years, was abolished in 1967 and its function given over to the Foreign Affairs Committee and the Internal Affairs Committee; it was reconstituted in 1968. A Minister, normally of cabinet rank, holds the defence portfolio; he may be assisted by Deputy Defence Ministers. Under him are the Defence Secretary, the Scientific Adviser, the Chiefs of Staff of the Army, Navy, and Air Force, and the various Committees. The main Defence Minister's Committees are: (1) Inter-Services Committee, composed of the Defence Minister, the Deputy Defence Ministers, the Defence Secretary, the Chiefs of Staff, the Scientific Adviser and the
Financial Adviser; (2) Chiefs of Staff Committee; (3) Services Committees of the Army, Navy and Air Force; (4) Defence Research and Development Council, which, in addition to the members of the Inter-Service Committee, includes Departmental Secretary, the Director General of Armed Forces’ Medical Services, and the Director General, Council of Scientific and Industrial Research.

The Ministry of Defence is the secretariat of the Defence Minister and the mouthpiece of the top defence organization. One of the two dozen Ministries of the Government of India, it has had no precedent in the British days. In those days, the Defence Department was simply an oversea office of the British Government presided over by a British Commander-in-Chief. In 1942 it was split but re-integrated after the war. This then became the precursor to the present Ministry of Defence.

In the beginning this Ministry developed haltingly and even apologetically, as some of its earlier reports indicate. But with
time have come confidence and a sense of authority, and its role has increased from merely obtaining policy decisions of the Government and co-ordination to becoming the Government itself. Today its function is, as its reports say, "the defence of India and every part thereof, including preparation for defence and all such acts as may be conducive in times of war to its prosecution, and after its termination to effective demobilization."

Inevitably enough, the Ministry has three faces. With one, the political face, it looks at Parliament; its head, the Defence Minister, briefed by the Ministry, is the Government's parliamentary spokesman on defence affairs. With the second, it looks upon its principal instrument of power, the armed forces, over which it exercises authority through the three Services Headquarters. With the third, it looks upon its own empire which it controls directly, consisting of a large number of departments, agencies and supply and manufacturing centres. And it also keeps in touch with other Ministries and Departments concerned with national defence and with foreign governments as decided by the Cabinet.

The Ministry is a body composed almost wholly of civilians, clerks, assistants, superintendents, and secretaries of various ranks. There have been military officers who have retired and been re-employed and others who have shed the uniform and sought careers in a civilian capacity. Hardly any one of them has landed in the Ministry of Defence. Ministerial posts are generally not interchangeable with military posts. Now and again the Ministry sends its officials to staff colleges for studies in defence problems and strategy, but such cases are not many. The civilian defence official of India is thus typical—one who can talk about and pronounce judgment upon the knottiest professional problem with non-professional competence but professional air. Often this gives rise to a kind of barrier between itself and the Services Headquarters who in turn are not fully conversant with civilian chores; and from across this barrier the two coexist and conduct their dialogue.

The Ministry of Defence controls the three Services through their respective Headquarters, each headed by a separate Chief of Staff. The Chiefs of Staff, individually as well as collectively, give specialist military advice to the Defence Minister and the Cabinet. They are the channel of communications between the Services
and the Ministry, and through them the Ministry exercises authority over the Services. And they are responsible for the formation, control and administration of the respective Service under them. With them the operative side of the vast defence complex begins, ending up eventually in the lowest formation.

The predominantly civilian character of this system of control and command hits the eye. The military authority is in the hands of the President, the highest civil authority. The Cabinet is composed of Members of Parliament, who are civilian. An elected Member, the Defence Minister is of course a civilian, aided by a body, the Ministry of Defence, which is almost wholly civilian. This Ministry controls the ordnance factories and public undertakings for the manufacture of arms, which in turn are mostly manned by civilian personnel. Off and on Service officers are selected to head one or other of these weapon-producing centres, but in that capacity they come immediately under the Defence Ministry. Unlike the case in the USA, none of the three Services is directly concerned with the production of arms. Apart from the Committee of the Chiefs of Staff, all committees are assisting bodies of the Defence Minister, dominated by the civilian class.

Thus, if civilian control of military affairs is a hallmark of democracy, then the Indian High Command is obviously stamped with it. Any military dictator, should one ever arise out of the ashes of the democratic system, will have to contend with this fact of the military being barricaded by civilian fences from the various sectors of control and power.

But then democracy pays a price for it. It is not always easy to make civilians understand the need of a weapon system, the urgency with which it must be produced, and the qualities or specifications it should possess. Funds are forthcoming with reluctance and delays are rampant.\(^3\) It is a sadly remarkable fact of India’s military power that during the years 1947-62, not one major weapon or programme of infra-structure was completed in time or to satisfaction.

The administrative fulcrum of this system is the Ministry of Defence, which has grown out of all proportion since Independence. This is understandable, in view of the expansion of milit-

\(^3\) In his Untold Story, General Kaul has mentioned the case of the automatic rifle, not produced indigenously till after the Chinese attack.
Armed Forces Today. But as early as 1958 a report of the Parliamentary Estimates Committee said it was cluttered with work substantially of a routine nature. By devolving some of its work on to the public undertakings it has no doubt cut down its load, but the ordnance factories are still its direct charge, while new departments are ever growing. It does not appear so much a Ministry as an administrative office, much too swamped with small things to do its primary job of control, supervision and advice.

The Chiefs of Staff and their Committee are military advisers to the Defence Minister. But they have no direct access either to the Prime Minister or the Defence Committee of the Cabinet, a procedure which deprives them of a speedy, sometimes highly desirable, way of approaching the seat of power. In addition, the Chiefs are also cluttered with work involved in the administration of their respective Services; for they are advisers as well as administrators. In the days when the Services were small, this may have worked but today it is not consistent with the mounting load of defence responsibilities. To put them mainly on the task of higher planning, strategy and military advice, and divest them of the burden of running the Services is pre-eminently needed. But this would clip their wings and tell upon their authority and prestige. And so there are reluctances to change and a continuation of the inertia of tradition.

Perhaps nothing is more outdated than the meticulous care with which each principal component of the High Command tends to preserve its own identity. This does not happen only with the Ministry of Defence and Services Headquarters as mentioned above. It happens also with the three Services as a whole, which are autonomous in thought, word and deed. Even the Navy, one-thirtieth the size of the Army, must have a separate Chief of Staff, with a rank and status utterly out of proportion to the comparative range and load of duties with which he is entrusted. The three Services then function on the system of committees, of conferences, of separate offices with their own procedures, with the result that decisions tend to become incoherent, are delayed and involve waste of time and energy. The tendency is for every directorate to

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4 Twenty-Sixth Report, 1958-59, on Organization of the Ministry of Defence and Services Headquarters.

5 The British Chiefs of Staff have direct access to their Prime Minister.
establish a parallel directorate, just as for every post to have a parallel post, so that defence planning and strategy, which are of inter-Service character become the separate concern of individual Services, and instead of being integrated get dispersed. Now that quick decision is the essence of command, just as speed is the essence of operations, a system of control and command such as the one shown above would need modification.

3. ARMS SUPPLY AND PRODUCTION

Broadly, there are three sources of supply of equipment and weapons for the Indian armed forces. The first is through indigenous production. The second is the commercial market abroad. The third is the military aid or credit obtained from foreign Governments. Actually, one source has impact on the other. Even indigenous production is not indigenous cent per cent, depending, as it does, upon imports of critical material and machinery. And foreign markets for military ware are controlled by the Governments concerned.

Indigenous Production

The oldest source of arms is the domestic ordnance factory which every king or ruler in India has set up to feed his defence establishment. The British factory was, however, different from that of its predecessor in three ways. It was built with plant and machinery almost wholly imported; it was an adjunct of the main weapon building establishment located in Britain and was not an independent unit; and its output was insufficient or elementary.

There were 8 ordnance factories in the pre-war days and another 8 were established during the Second World War. They manufactured high explosives, ammunition, harness and saddlery, gun and shells, metal and steel, parachutes and clothing. They produced 3.7 inch howitzers and their ammunition, light machine guns, Enfield rifles, small arms and ammunition, and 25 pounder guns. A major assessment of these manufacturing centres was conducted by the Estimates Committee of Parliament, 1956-57, in its Sixty-Eighth Report. By then an additional Small Arms Factory and a Machine Tool Prototype Factory had been established.
while one of the existing factories had received a plant for the manufacture of modern ammunition.

This report gives a picture of what the state of home production was 8 years after Independence. The total number of machines installed in all the factories was 17,561. Of these, 23 per cent were over 20 years old, 62 per cent were 10-20 years old, and only 15 per cent had been installed during the previous ten years; and one factory was 154 years old. In eight factories, the equipment was outmoded to the extent of 20 to 75 per cent. Many machines broke down frequently and were "fit only for scrap". About 70 per cent of the plant in general had to be imported as also all the heavy machinery and precision equipment, mechanical transport and armoured vehicles. Indigenous capacity to manufacture machinery existed for very simple types only, such as drills, centre lathes, etc.

To this rotten machinery was added the inefficiency of the official machinery. No phased programme had been prepared to replace the old plants; and the amount of Rs. 70 million spent during 1951-56 for this purpose was not only small but was incurred thoughtlessly. No records had been maintained about the breakdowns and cost of repairs. Delays marred the processes of placing orders and acceptance and clearance for manufacture. Some machines came to India's share out of reparations from Germany. They were badly selected, as one-third were found unsuitable; and even after 6 years there were some awaiting overhaul before being put to use.

The ordnance factories in 1956 were a reflection of the poverty of arms production at home, industrial backwardness, and incompetence; they contributed their mite to the sorrows of NEFA and Ladakh.

The years 1963 and 1964 witnessed a spurt in defence production, organization and planning, thanks to the Chinese attack. There were 22 factories in 1963 comprising 7 General Engineering, 5 Metallurgical, 5 Clothing and Leather, 2 Chemical, 2 Filling-cum-Engineering, and one Cable. Two more, one General Engineering and one Filling-cum-Engineering, were added the next year. By now the First Five Year Defence Plan had been drawn and principles were laid down in a policy statement for a sound defence production base. The following were the guidelines:
(a) The Defence Services must have modern equipment and weapons combat-worthy in expected terrain and conditions of fighting.

(b) Manufacturing capacities for these should be indigenously established.

(c) Inasmuch as these capacities would not come up to the level of requirements, stockpiling should be undertaken and the civil sector should be tapped.

(d) When production has met demands, manufacture of such items be undertaken as strengthen the country's general economy.

The ordnance factories have since then begun to be modernized at a cost of Rs. 330 million spread over 5 years, half of which involves foreign exchange component. These factories now produce some of the more modern weapons, as also the new kind of equipment needed for mountain warfare. The initial proposal was to set up six new factories for the manufacture of small arms and ammunition and explosive, two with the assistance of the USA and the UK. Subsequently American and British assistance was not forthcoming, hence only four factories have been established during this first phase of reconstruction. The ordnance factories have also accelerated their programmes of training technical personnel, and are seeking more and more assistance from the research and development organization of the Government which, lying dormant for years, has now been activized. Meanwhile, medium tanks, jeeps, heavy trucks and a variety of heavy engineering equipment are already rolling off the production lines.

The ordnance factories are a closely guarded preserve of the Government. In the early years of Independence they enjoyed monopoly in the production of defence weapons and stores. The question of associating the civil sector with them, though always open, was never settled; official thinking militated against this association. The report of the Estimates Committee, mentioned above, noted this fact and even rebuked the Defence Ministry for not tapping the country's private resources to back the Government effort, pointing out that ordnance factories could never meet the total defence demands.

But it also noted another thing. While the factories were not
catering adequately to the Services' requirements, they were turning out goods for the civil market, at one time as much as 30 per cent of the total output. Apparently, there had grown a surplus capacity in certain fields, or, what is more likely, there was little co-ordination and exchange of information between one field of production and another. The old tradition of keeping civil industry away from the manufacture of arms had something to do with this state of affairs, but there were ideological reasons also. Many at the helm of affairs looked askance at the possibilities of creating "arms kings" in the country. This viewpoint was not materially altered even by the imminence of the threat from China.

For the first time in 1963 the Ministerial reports and statements began to emphasize the importance of the civil sector, but even then attempts to tap it were half-hearted. What with the assistance which some countries offered and the sympathy which appeared to be flowing in, it was thought that the doors of external sources for arms had been flung wide open. They never were, and in any case were closed with a bang after the war with Pakistan.

Then, in late 1965, a new agency, the Department of Defence Supplies, was set up. Its main function has been to utilize the industrial capacity of the country for research, development and manufacture of arms. Technical committees have come into being for this purpose. Sample rooms have been opened in principal cities, manned by experts who explain exhibits and offer assistance in preparing drawings and specifications to the prospective manufacturers. Response has been good and the Defence Ministry's reports for 1966, 1967, and 1968 state that a large number of offers have been received for a variety of weapon components. The manufacture of complete arms and ammunition is however to be undertaken only by the Government.

Apart from the ordnance factories and the civil industry, there is a third sector of indigenous production, embracing "the public sector undertakings". There are seven of them:

1. Hindustan Aeronautics Ltd.
2. Bharat Electronics Ltd.
3. Mazagon Dock Ltd.
4. Garden Reach Workshops Ltd.
5. Praga Tools Ltd.
6. Bharat Earth Movers Ltd.
7. Goa Shipyard Ltd.

They are all Government concerns. The entire share holdings of all of them are held by the Government of India—except Praga Tools Ltd., in which a State Government participates to the extent of 32 per cent and the general public 12 per cent. They differ from "departmental undertakings" in having a company form of management with decentralized authority and more powers, and are expected to follow business methods and develop capacity to show profits. The total subscribed capital of all these undertakings was Rs 600 million in 1968, supplemented by Government loans.

Hindustan Aeronautics was formed in 1964 with the merger of three independent units, Aircraft Manufacturing Depot., Aeronautics India, and Hindustan Aircraft, of which the last had been established in 1940. Its aircraft production programme includes the Gnat, Maruth, Krishak (AOP aircraft), Kiran (jet trainer), and Alouette helicopter, all of which are under manufacture and being supplied to the Indian Air Force. HS 748 is being produced both for the IAF and the Indian Airlines Corporation. It also manufactures Orpheus 701 and Orpheus 703 engines respectively for the Gnat and the Maruth, and the Dart engine for the HS 748. The establishment of Mig manufacture is under way.

Established in 1964, Bharat Electronics manufactures transmitters, receivers, radar, and radio, and also individual items like receiving valves, transmitting tubes, transistors, capacitators, crystals and semi-conductors. The company caters for defence services as well as civil industry.

Mazagon Dock, set up in 1934, has been essentially a yard for general engineering repairs and minor ship repair. It is now being expanded and includes two ship-building slipways, fabrication and machine shops, and 4 additional berths constructed by impounding Wet Basin. Indian frigates are being built in this yard, so that it has become both a repair and manufacturing centre.

Garden Reach Workshops, established in 1934, has jetties, slipways and dry docks, and undertakes ship construction, ship repairs and general engineering work. It specializes in the design and construction of shallow draft vessels including tugs, light naval craft, river steamers, barges and water boats. General engineering
manufacture includes turbine water pumps, mine haulages and conveyor cranes, road rollers and air compressors. Among its expansion programmes are a marine diesel engine and a dry dock.

Established in 1943, the Praga Tools has had a chequered history of waste and losses, but has now been reorganized. Its principal work lies in manufacturing drilling machines, grinders and machine tools accessories, but has now and again been entrusted with job work such as making carbine barrels, dies for 7.62 mm ammunition, and tools for naval armament.

A newcomer to the defence domain, Bharat Earth Movers was set up in 1964, initially with the transfer of the rail coach division of Hindustan Aircraft, now merged into Hindustan Aeronautics. To this is being added the manufacture of heavy earth-moving equipment needed for defence as well as irrigation and power projects. Goa shipyard came into being in 1967 and is engaged in constructing small craft.

Over a period of a decade and a half, India has set up a sizeable base for producing arms of a defensive nature. It has not yet undertaken production of bombers, missiles or big warships.

Foreign Sources

Foreign sources for arms and ammunition on a commercial basis have had to be tapped right from the inauguration of Independence. Domestic resources have been inadequate in almost every respect; besides the policy of non-alignment, which rules out military alliances also rules out free or concessional military assistance accruing from them.

In the beginning India bought aircraft, ships, electronic equipment, ammunition of various calibres, and armament of one kind or the other. Western Powers were the principal sources, especially Britain, France, Switzerland and Italy. America rather kept away while Russia was not approached.

Alongside purchase, foreign collaboration was secured to promote indigenous production. This came, among others, from Messrs Philips of Holland, Marconi of England, Contraves of Switzerland, Nippon Electrical Company of Japan, Sud Aviation of France, and MAN of West Germany. A grand assembly, it nevertheless produced components of weapons, and not full weapons;
and, considering the multifarious requirements of the armed forces, not many components either. For spares of the weapons India was soldered firmly to the manufacturers abroad.

Nevertheless, the effort was enough to add to the illusion that India was getting well along the road to "self-sufficiency" in arms. That illusion was dispelled after the Chinese attack, and for the first time foreign Governments were openly approached for military assistance. During 1964 and the first half of 1965, a large number of missions went abroad in this connection. Eventually, it was to the USA, Russia and Britain that the eyes turned hopefully.

America had helped during hostilities with China and was expected to give assistance on a more permanent basis, especially because here was its opportunity to build up a pronounced anti-China ally. India produced a long shopping list of items, some of highly sophisticated nature, including supersonic planes, missiles, radar and naval craft. But America had its own way of looking at things. India was not an ally as Pakistan still was, did not support American power position either in South-East Asia or the Indian Ocean, and was a friend of Russia. And should India have a power status beyond a certain point? America's answer to this was by no means a clear yes. Nor was Russia's, but Russia had decided quite early in the day that India ought to be in Asia a countervailing force to Western imperialism and Chinese power. As for Britain, it was already a supplier of India through its old imperial ties, but had not hesitated to use its privileged position to withhold spares etc. as a bargaining counter. In the new situation it sought to co-ordinate its assistance with that of the United States.

So on September 21, 1964, Defence Minister Chavan told Parliament the upshot of the discussions with the USA, the Soviet Union, and the U.K.:

(1) The USA would provide:

(a) A credit of 10 million dollars for renovation and modernization of ordnance factories.

(b) A grant of 60 million dollars during the fiscal year 1965 (July 1964 to June 1965), for items in support of
Indian mountain divisions, air defence communications, transport aircraft support, and road construction in the mountain border.

(c) A credit of 50 million dollars during the fiscal year 1965 for setting up small arms and ammunition factories.

It was assumed, though not categorically stated, that further similar grants and credits would be forthcoming.

(2) The Soviet Union would provide:

(a) Enhanced facilities, in the shape of plant, tools and personnel, for the early establishment of Mig factories.

(b) Mig aircraft, on commercial basis, for equipping 3 squadrons of the IAF.

(c) A certain number of light tanks, helicopters and missiles.

Russia was in a position to supply submarines and naval craft also, and this was to be examined.

(3) The U.K. would provide a credit of £ 4,700,000 to cover the external costs of reconstruction of the Mazagon Dockyard of Bombay and the subsequent construction there of 3 Leander-Class frigates. The total foreign exchange cost of the project being £ 13,660,000, further credit would be required, and the British Government said it would consider this in due course “in the light of circumstances at the time.”

How did all this turn out? It will be noticed that the American assistance, howsoever valuable, was to be in respect of relatively minor arms of a defensive nature, suitable in particular for mountain warfare. In the end items worth only $70 million were forthcoming; the Indo-Pakistan war cut out the rest. Russia carried out its commitment in full. Those were the heydays of Indo-Soviet relations; Russia was rather affected by China’s mounting belligerency and not inhibited then by “friendship” with Pakistan. If the Government had been more prompt and the Defence Ser-
vices had been more willing, it would have also supplied submarines promptly, even bombers. After a spell of suspension, the British resumed its supplies, though it was clear that its long-range naval assistance was not without strings; Indian requests for destroyers and submarines were refused.

And so ended India's first attempt to secure foreign military assistance of a sizeable character. It was a very moderate success, considering the total requirements, achieved through an exciting feat of diplomacy.

But, as it appears in 1969, there is no mistaking the fact that with foreign assistance, largely Russian and British, typically non-aligned as Indians would say, India has been placed in the position of take-off in regard to the production of arms.

4. INFRA-STRUCTURE

Under this heading brief notes are given in regard to India's defence budget, National Cadet Corps, border security and nuclear programme, all of which are significant for military power.

Defence Budget

At the end of this chapter are given two tables, one giving India's defence expenditure during 1960 and 1968 and the other showing the relationship of this expenditure to Central Expenditure and National Income during 1964 to 1968, that is, the years when the budget rose steeply.

In general, India is scheduled to spend Rs. 50,000 million on defence during the five years of the Defence Plan from 1964 to 1969.

It is often the practice to compare defence budgets of various countries and call them high or low. Such comparisons are not without use but can also be irrelevant, for problems of defence differ from country to country and time to time and have to be correlated to specific dangers, circumstances and situations.

Till the Red Chinese invasion in 1962, India spent on the average Rs. 2,500 million a year on its armed forces. Interestingly enough, this amount is almost exactly equivalent to the amount the British spent every year out of the Indian exchequer during
the decade prior to the Second World War. The average British Indian defence budget was Rs. 480 million a year, or Rs. 2,400 million a year in terms of the average 1950-60 prices, which were about five times higher. But the British spent not only this money but also provided other imperial resources to safeguard India's security. By this yardstick India did not spend enough in the post-Independence period till 1962.

There has been a steep rise in military expenditure after 1963. Over a period of six years it has been 35 per cent of the Central Expenditure and 4.1 per cent of National Income. Of the allocations to the three Services, 78 per cent has gone to the Army, 4 per cent to the Navy and 18 per cent to the Air Force.

National Cadet Corps

This is a body of school and university students who are given elementary military training. The object is twofold; first, to stimulate interest in the country's defence and build up a reserve of manpower for the armed forces; second, to inculcate discipline in the youth. No service liability is attached to the Corps. Optional till 1963, entry into it was made compulsory for all able-bodied male college students after that date, and has now been made optional once again.

The N.C.C. consists of junior divisions for school boys and girls and senior divisions for the girls and boys of colleges and universities. They are divided into three wings, the Army, Navy and Air; periods of training are respectively two and three years. Training in drill and rifle is basic, and, at the higher level, includes fieldcraft, naval instruction, flying, and engineering, as the particular arm of service demands. A certain number of officers and cadets are attached for short periods to regular army units and ordinance factories to receive firsthand experience. Suitable cadets are specially trained in Officer Training Units for selection for commission, while all cadets can compete in the Union Public Service examination for direct entry into the Indian Military Academy, thus bypassing the 3-year course of the National Defence Academy. The N.C.C. has a wide range of non-military activities also, including mountaineering, rock climbing, gliding and ocean sailing.
Presently (1969), the strength of the NCC is 1,200,000.

**Border Security**

Two special features of border security arrangements are noteworthy.

The first relates to the construction of border roads. This is undertaken by the Border Roads Organization, which was established in 1960 under the chairmanship of the Prime Minister, keeping in view the rapid advances of the Chinese in the Himalayan region. The road-building component of it comprises non-military, voluntary personnel, engineers, suppliers, administrators and doctors; but they are in their own uniform and are subject to a minimum of prescribed discipline.

Over a period of 6 years nearly 1,800 miles of roads have been built in the border area, and another 2,500 miles are planned; it has taken about one million rupees to construct one mile of road, and the completed road is subject to heavy maintenance costs. Among the major roads, completed or soon to be completed are: Srinagar-Len road; Hindustan-Tibet road and Manali-Len road in the western sector, Par-Rhuntsholing road (Bhutan) and Siliguri-Gangtok road (Sikkim) in the central sector; and Tezpur-Tawang road in the eastern sector. Offshoots of these run in various directions, some to the more forward outposts.

The second feature is the establishment of a new body, the Border Security Forces under the Ministry of Home Affairs. This was constituted in 1965 with a threefold aim, to institute a tight security arrangement along the land frontier, to bring this arrangement under an integrated central control, and, consequently, to take over the task of border security from the constabulary of the States concerned. The duties of the Forces are of a combined military and police nature and include not only defence against infiltration but also measures to prevent sabotage, sniping, smuggling, kidnapping and stealing cattle. Forming a second line of defence, they are replaceable by the army in an emergency. Training courses, modelled on army training, vary from 5 to 12 months and are presently imparted at four centres; the biggest of these centres is at Tekanpur on the Gwalior-Jhansi road, which runs through the Central Mountain range.
Nuclear Programme

Nuclear energy is obtained by fission or fusion. Uranium is the most common fissionable material today, occurring in nature in three isotopes, U 238, U 234 and U 235. Of these only U 235 is most easily fissile, but it occurs only .07 per cent in a mass, the bulk of which, about 99 per cent, is made up of U 238. Nuclear technology therefore begins with an arrangement of separating U 235 from natural uranium. This is done at present in a gaseous diffusion plant, which is undoubtedly the most difficult and expensive part of the initial process. When burnt, Uranium 235 produces U 239 or plutonium, which is also easily fissile. Beside uranium, thorium is a fissible substance from which the fissile U 233 is produced. India has sizeable quantities of uranium in Bihar and possibly in certain sectors of the Himalaya, while on the West Coast it has one of the largest reserves of thorium in the world.

Thus, to all intents and purposes, U 233, U 235 and U 239 are the basic ingredients of nuclear energy. Fusion, presently of the atoms of hydrogen, also needs fission first to generate the necessary temperature. In passing, it may be stated that highly advanced technology is required to get U 233 from thorium. And with advanced technology U 238 can also be fissione; in fact, the more powerful bombs can be built only by the fission of U 238 and not by that of U 239 or plutonium.

Against the above background Prime Minister Lal Bahadur Shastri defined India’s nuclear programme in a statement made to Parliament on 28 September, 1964. The programme is in three stages. In the first stage there are reactors fuelled by natural uranium which will produce plutonium. Then the reactors will be fuelled by this plutonium. At this stage some U 233 will be produced from thorium. In the third stage there will be breeder reactors which are run on the thorium-uranium 233 cycle.

India’s nuclear effort may be traced back to 1945 when the Tata Institute of Fundamental Research was established with nuclear physics as a subject of study. The programme proper was initiated in 1957 when the Department of Atomic Energy was inaugurated. A part of the Atomic Energy Commission, this is now organized into many divisions of scientific disciplines. Present-
ly India has four main nuclear projects.

The first and earliest project is the 40-megawatt capacity reactor in Bombay installed with Canadian assistance; this uses natural uranium. The second reactor is at Rana Pratap Sagar, Rajasthan, with two units, each of 200 megawatt capacity. This too is built with Canadian assistance and is fuelled by natural uranium, employing heavy water as moderator. The Indo-American reactor at Tarapur, Maharashtra, is also of two units with a total capacity of 390 megawatts; it employs enriched uranium as fuel. The fourth reactor is at Kalpakkam Madras of the same capacity as the other two bigger reactors.

The Maharashtra atomic power station is to be commissioned in 1969, the first unit of the Rajasthan station also in 1969, and the second unit of this station and the first unit of the Madras station in 1971.

In addition to the above, a nuclear complex of considerable variety has grown. The mining and processing of uranium ore in Bihar has commenced. A chemical plant for separation of plutonium from the reactor material has been set up in Bombay and another, of larger capacity, is under way. A heavy water plant and an experimental fast breeder reactor based on thorium are in the project stage; so are three plants for producing uranium oxide, ceramics fuel and zirconium. Under the aegis of the Atomic Energy Commission there are arrangements for the manufacture of electronic equipment, a space science and technology centre, and a centre to manufacture propellents for rockets.

Of the four reactors, the one at Bombay is for experimental purposes. The other three are meant primarily to generate power for homes, schools, hospitals and industries; 1.2 million kilowatts of power will be generated by them.

But plutonium also is or will be available as a side-product from three of the reactors; the Maharashtra reactor is the exception as it uses enriched uranium. The total plutonium expected is about 600 kg, which is enough to build about 100 small-size bombs. So far the Bombay and Rajasthan reactors are under international safeguards, having been built with Canadian assistance; the Madras reactor may be wholly indigenous.
### Schedule III

**Statistics of Expenditure on Defence**

(a) *Effective Defence Expenditure during 1959-69 (in million Rs)*

<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Capital Outlay</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959-60</td>
<td>1,490</td>
<td>154</td>
<td>641</td>
<td>370</td>
<td>2,655</td>
</tr>
<tr>
<td>1960-61</td>
<td>1,640</td>
<td>170</td>
<td>520</td>
<td>340</td>
<td>2,670</td>
</tr>
<tr>
<td>1961-62</td>
<td>2,040</td>
<td>200</td>
<td>600</td>
<td>260</td>
<td>3,100</td>
</tr>
<tr>
<td>1962-63</td>
<td>3,390</td>
<td>205</td>
<td>779</td>
<td>488</td>
<td>4,862</td>
</tr>
<tr>
<td>1963-64</td>
<td>5,320</td>
<td>213</td>
<td>1,340</td>
<td>1,120</td>
<td>7,993</td>
</tr>
<tr>
<td>1964-65</td>
<td>5,240</td>
<td>229</td>
<td>1,260</td>
<td>1,130</td>
<td>7,859</td>
</tr>
<tr>
<td>1965-66</td>
<td>6,140</td>
<td>304</td>
<td>1,470</td>
<td>1,350</td>
<td>9,264</td>
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<tr>
<td>1966-67</td>
<td>6,500</td>
<td>347</td>
<td>1,500</td>
<td>1,160</td>
<td>9,507</td>
</tr>
<tr>
<td>1967-68</td>
<td>6,920</td>
<td>390</td>
<td>1,600</td>
<td>1,180</td>
<td>10,090</td>
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<tr>
<td>1968-69</td>
<td>7,035</td>
<td>382</td>
<td>1,680</td>
<td>1,305</td>
<td>10,402</td>
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<tr>
<td></td>
<td>45,715</td>
<td>2,594</td>
<td>11,390</td>
<td>8,703</td>
<td>68,402</td>
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</tbody>
</table>

**Notes:**
1. The above does not include non-effective charges. In 1968-69 these amounted to Rs 270 million.
2. Figures of the last three years represent near estimates.
3. For reference see Defence Services Estimates issued by the Government of India from year to year.

(b) *Defence Expenditure, Central Expenditure and National Income 1963-68*

<table>
<thead>
<tr>
<th></th>
<th>(1) Defence Expenditure (in million Rs.)</th>
<th>(2) Central Expenditure (in million Rs.)</th>
<th>(3) National Income (in million Rs.)</th>
<th>Percentage of (1) to (2)</th>
<th>Percentage of (1) to (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-64</td>
<td>8,160</td>
<td>21,170</td>
<td>2,00,000</td>
<td>39</td>
<td>4</td>
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<tr>
<td>1964-65</td>
<td>8,060</td>
<td>23,170</td>
<td>2,14,000</td>
<td>35</td>
<td>4</td>
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<tr>
<td>1965-66</td>
<td>9,500</td>
<td>24,870</td>
<td>2,00,000</td>
<td>38</td>
<td>4.7</td>
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<tr>
<td>1966-67</td>
<td>9,800</td>
<td>28,430</td>
<td>2,38,000</td>
<td>34</td>
<td>4</td>
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<tr>
<td>1967-68</td>
<td>10,300</td>
<td>31,100</td>
<td>2,50,000</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>1968-69</td>
<td>10,700</td>
<td>31,480</td>
<td>2,65,000</td>
<td>34</td>
<td>4</td>
</tr>
</tbody>
</table>

**Notes:**
1. Variations from figures in (a) are due to adjustments of non-effective and miscellaneous charges.
2. Figures of national income are calculated from Draft Five Year Plan pp. 3 and 61, and are approximate.
STATISTICS OF WEAPONS

This schedule provides statistics of a few more familiar combat weapons with which the present-day armed forces are equipped. It is only illustrative, and by no means comprehensive. The weapons have been placed in six categories: small arms, artillery weapons, tanks, aircraft, warships, and guided missiles. All categories, except the first, contain nowadays specially prepared weapons which can fire nuclear explosives; the so-called nuclear weapons. Statistics about these are largely classified. There are also weapons of chemical and biological warfare, which are mostly secret.

1. SMALL ARMS

These include pistol, rifle, carbine, machine gun and grenade. Light weight, small calibre, and capability of use by the soldier individually are their outstanding characteristics. Variation in these characteristics lends them great variety, so that there are many types of one and the same kind of small arms. The rifle is the most versatile and the most common single weapon used by infantry. Among many types of rifles, the 7.62 mm type is being widely accepted as standard. Operation of the rifle is semi-automatic or fully automatic as selected by the soldier.

Statistics

Rifle, 7.62 mm: Calibre, 7.62 mm; weight, 9 lb. 9 oz; length, 45 in.; range, 600 yards; rate of fire (automatic), 750 rounds per minute; magazine capacity, 20 rounds.

2. ARTILLERY WEAPONS

Compared to small arms, these weapons are heavier and have a wider calibre and are used by groups of soldiers together. Those pieces of artillery which accompany infantry are comparatively smaller than those with which artillery arm of service is
equipped. Gun, cannon, rifle, howitzer and mortar are the various names by which the artillery weapons are described; anti-aircraft gun is also an artillery weapon. Countries which are able to manufacture these arms generally select their own calibres for them, which have a tendency to become larger and larger, although of course there is a limit to the size.

The USA uses guns of many calibres, including 90 mm, 105 mm, 120 mm, 155 mm, 175 mm and 8 in. Britain uses its own make of 105 mm gun and is also adopting the 155 mm and 175 mm guns of the USA, discarding the older 25 pounders and 5.5 in. guns. The main Russian types are 122 mm, 130 mm and 152 mm. India uses 75 mm, 105 mm, 120 mm and 7.2 in., and is discarding 25 pounders.

**Statistics**

105 mm pack howitzer: Calibre, 105 mm; barrel length, 81 in.; range, 11,000 yards; rate of fire, 5 rounds per minute.

155 mm gun (M 2): Calibre, 155 mm; barrel length, 23 feet; range, 25,300 yards; rate of fire, 40 rounds per hour.

8 in. howitzer (atomic cannon): Calibre, 8 in.; barrel length, 202.5 in.; range, 18,000 yards; rate of fire, 30 rounds per hour.

40 mm L/70 Bofor (anti-aircraft): Calibre, 40 mm; barrel length, 122 in.; range, 3,000 yards; rate of fire, 240 rounds per minute.

3. **TANKS**

Tank is one of the many kinds of vehicles which are armoured. In this schedule statistics are given only in respect of the battle tank, which may be defined as the armoured vehicle capable of fulfilling all the main tasks of the armoured troops in the battlefield. As a rule it is fully tracked and armed with medium-calibre high-velocity guns. Other armoured vehicles, sometimes also described as tanks, are not so versatile and are built to perform specialized roles, such as reconnaissance, engagement of air targets, tank destruction and flame-throwing. Tanks are classified heavy, such as 50 tons; medium, such as 35 tons; and light,
such as 15 tons.

Modern tanks seek many superior qualities, including armour least vulnerable to enemy fire, facilities of safety and of day-and-night operation for the crew, powerful guns, and good manoeuvrability and range.

About a dozen countries produce armoured vehicles of one kind or another, including the USA, Britain, the USSR, and India. Since the beginning of the Second World War, the USA alone has produced some five dozen types of heavy, medium or light tanks. Tanks presently in use include USA—M-47 and M-60, both medium, and M-103, heavy; Britain—Chieftain, medium, and Centurian, heavy; USSR—T-54 and T-62, both medium, and T-10, heavy; India—Vijayanta, medium, and Centurian, heavy. In addition, these countries also use light tanks; India uses AMX-13.

**Statistics**

M-47 (Patton): Weight, 44 tons; armour, 110 mm; crew, 5; armament, 90 mm gun, two 7.62 mm machine guns, one 12.7 mm anti-aircraft gun.

Chieftain: Weight, 47 tons (approximately); crew, 4; armament, 120 mm gun, two 7.62 machine guns.

T-54: Weight, 36 tons; armour, 85 mm; crew 4; armament, 100 mm gun, two machine guns, one anti-aircraft gun.

Centurian (Mark VII): Weight 50 tons; armour 76 mm; crew 4; armament, 83.4 mm gun, one machine gun.

AMX-13: Weight, 13 tons; armour 40 mm; crew 3; armament 75 mm gun.

4. **AIRCRAFT**

The basic combat aircraft are the bomber and the fighter. Sometimes the two roles of bombing enemy targets and fighting enemy aircraft are combined, giving rise to the fighter/bomber. There are also many types of aircraft which are of military use but perform supporting roles, including transport, air rescue, reconnaissance, and air refuelling.

During its development as a military weapon over a period of half a century, the aircraft has undergone numerous transform-
ations, modifications and advancements. The basic problems, however, hinge round the old, well-known concepts, that is, reliability, speed, range, payload and armament. The more modern aircraft are noted for their dependability, power obtained from jet or rocket, high speed and high altitude flying over long distances, and powerful weapons which include not only improved cannon but missiles, some nuclear-tipped. Among them are also a few which are designed so as to depend the minimum on the supporting infra-structure; to this class belongs the vertical take-off and landing-aircraft.

The USA, Britain, USSR and France are the four major countries which have produced a great variety of aircraft since the Second World War; India has also struck a path in this direction. Among a large number of aircraft, the USA uses B-58, B-52 and FB-111 bombers and the F-104 fighter. Britain uses Victor 2 and Vulcan 2 bombers and the Lightning fighter. Russian aircraft include Bear, Blinder and Brewer bombers and SU-7 and Mig-21 fighters. Mirage IV is an outstanding French bomber. Indian combat planes include the Canberra bomber, Mig-21 fighter and HF-24 Marut fighter/bomber.

Statistics

B-52: Max. speed, 665 mph; ceiling, 60,000 feet; range, 9,000 miles; armament, nuclear and conventional bombs, air-to-surface missiles, and 20 mm cannon.
Bear: Max. speed, 500 mph; ceiling, 40,000 feet; range, 8,000 miles; 25,000 lb. bombs.
Canberra: Max. speed, 550 mph; ceiling, 50,000 feet; range, 2,400 miles; armament, eight 1,000 lb. bombs, 20 mm cannon.
F-104 A: Max. speed 1,500 mph; ceiling, 36,000 feet; range 1,500 miles; armament, 20 mm cannon, air-to-air missiles and air-to-surface missiles, 1,000 lb. bombs.
Mig-21: Max. speed 1,100 mph; ceiling, 36,000 feet; range, 800 miles; armament, two AA missiles.
HF-24: Max. speed, 800 mph; ceiling, 40,000 feet; range, 700 miles; armament 30 mm cannon, air-to-air rocket, 1,000 lb bombs.
SU-7B: Max. speed 1060 mph; ceiling 3600 ft.; armament 30 mm cannon, rockets, bombs.

5. WARSHIPS

Warships in the combat role comprise aircraft carriers, cruisers, destroyers, frigates and submarines. When built for the support role, they are used for supply, maintenance, oceanic survey, intelligence and minesweeping. Sea-keeping qualities, endurance, speed, manoeuvrability and armament are the feature looked for in combat vessels. Among the modern developments are the introduction of gas turbine propulsion instead of steam propulsion, and more recently of nuclear power propulsion. The latest warships are fitted with guided missiles in addition to the usual guns or torpedoes, and some of these missiles are nuclear tipped. All warships, except the submarine, which perform battle roles are now capable of carrying helicopters.

Only about a dozen countries possess aircraft carriers. Built mostly during the Second World War, about 40 of them are in use at present. The USA has the largest number of them, India has one, while the USSR has also one, with more under construction; Britain has decided to dispense with them in the 1970’s. The cruiser is a general purpose warship which may be used to move troops, provide gun power support or be employed in tactical role. Destroyers and frigates are increasingly forming the bulk of the modern navies. They are smaller in size and faster than cruisers, and perform a more specialist role. British frigates of the Leander class, which India is also building, specialize in anti-aircraft, aircraft direction and anti-submarine tasks. Destroyers protect shipping and aircraft carriers, provide coastal defence, and give gunfire support in naval operations.

**Statistics**

**Enterprise:** Aircraft carrier; displacement, 76,000 tons; aircraft, 100; radius, 400,000 miles; armament, ship-to-air guided missiles.

**Vikrant:** Aircraft carrier; displacement, 16,000 tons; aircraft, 21; armament, AA guns.
Sverdlov: Cruiser; displacement, 16,000 tons; radius 5,000 miles; armament, 6 inch and 3.9 inch guns and 37 mm AA guns.
Mysore: Cruiser; displacement, 8,700 tons; armament, 6 inch guns, and 4 inch and 40 mm AA guns.
Nilgiri: Frigate; displacement 2,400 tons; armament, 4.5 inch guns, 40 mm and 20 mm AA guns; Seacat missile; Wasp helicopter.
George Washington: Submarine; displacement, 5,600 tons; armament, Polaris missiles.
Kalvari: Submarine (ex-Soviet F. class): displacement, 2,000 tons; speed, 20 knots surface; armament, 21 in. torpedoes; complement, 70.

6. GUIDED MISSILES

While missiles have been known since times immemorial, the guided missile had to await many scientific developments of the highest order, particularly in electronics, rocketry and metallurgy. Guidance may be inertial or by radio or by a combination of the two. In certain weapons guidance is secured by electronic signals transmitted through a fine wire which unreels behind the missile. There are four types of missiles: the surface-to-surface missiles, the surface-to-air missiles, the air-to-air missiles, and the air-to-surface missiles. They may be put in two categories: those which are employed for strategic purposes and have a long range, e.g. 5,000 miles, or medium range, e.g. 1500 miles; and those employed for tactical purposes, having a range as low as 2 miles or so. All strategic missiles are as a rule nuclear-tipped, but tactical missiles may or may not be so.

About a dozen and a half countries are known to be implementing missile programmes of one kind or the other; India is not reckoned among them as yet. However, only in the USA and the USSR the programmes are sizeable and of considerable variety.

Statistics

Minuteman: Surface-to-surface. Weight, 70,000 lbs; speed, 17,000 mph; ceiling, 700 miles; range, 7,000 miles.
Polaris: Surface-to-surface. Weight, 30,000 lbs; speed 7,500 mph; range, 2,900 miles.

Sergeant: Surface-to-surface. Weight, 10,000 lbs; range, 100 miles.

Guideline (SA-2): Surface-to-air. Weight, 3,000 lbs; speed, 1,900 mph; ceiling, 80,000 feet; range, 28 miles.

Sidewinder: Air-to-air. Weight, 160 lbs; speed, 1,900 mph; range, 2 miles.
INDIA'S SMALL WARS AND BIG SECURITY PROBLEMS

During the first twenty years of its Independence, India has conducted military operations in three areas of its territory, Hyderabad, Goa and Nagaland. These are not being discussed at present, even though they are certainly not without interest and significance. It has also fought three wars, two with Pakistan and one with China, and these are the subject-matter of the present chapter.

These have been small wars, whether from the point of view of national resources, strengths of the armed forces, the theatre of military actions, or the duration of fighting. But in its dramatic violence and sweep, every war brings into relief some vital features of the history and life of a people, which in normal course are not visible or not heeded. These wars, even though severely limited, have done this.

Today, as before, India has been invaded by peoples from the north-west or the north. The routes of invasion have been historic, or fairly well-known, if not historic. In one case battles have been fought precisely where they have been fought over centuries. Territory has been the main motivation, but as before this has been reinforced by religious fanaticism or, its modern version, militant ideology. Much as in the days of the Persians and the
Greeks, Indians have been on the defensive, while some of them have even argued with all their heart the futility of shedding blood. As an aftermath, two kinds of situations have arisen as they used to arise in the days gone by. On the one hand, Indians are developing strength to confront further dangers to their national survival; they are capable of this. On the other hand, they are preoccupied with enormous pettiness and futilities, frittering away their strength; they are capable of this also.

The significance of the preceding thirteen chapters will be highlighted if the following descriptions of battles are read with the above borne in mind.

Even though battles have been waged both in the mountains and the plains, trouble has originated in the northern mountain border. That Indians have been taking this great mountain barrier for granted, as something permanent and impregnable, has no doubt been due to its massive character, but there have also been other reasons. Indian genius which creates poetry out of Himalayan snows and rivers, finds solace in the calm and isolation of high altitudes, and even installs gods on mountain peaks, seldom contemplates the Himalaya as a theatre for the profane operation of soldiers. Indian cosmology is still built around Mt. Kailas and Mansarowar Lake, unconcerned with the fact that these are no longer a part of Indian territory.

The British were more hard-headed. A Kipling even though moved by the poetry of the Himalaya never overlooked its importance as an imperial bastion. In the British days the Himalaya, while adulated by romanticists, was also physically controlled and strengthened by politicians. And yet even the British did not give this frontier zone the necessary stability. They gave it a pause, by keeping Russia away, by neutralizing Tibet and by dominating Nepal. This was a pause, not a settlement, of the border, which was practically without demarcation anywhere. The border structure was in their times a kind of hanging garden, never rendered firm though kept in balance with ropes and props. When the British left bag and baggage, ropes and props, this structure shook badly, causing tremors throughout the borderlands.

The tremors were felt first in the State of Jammu and Kashmir.
1. THE FIRST WAR WITH PAKISTAN

Infiltration and Battles

In the summer of 1947, when partition was in the air, the question for the rulers of the princely states was to decide upon accession with India or Pakistan. While others made up their mind, the Maharaja of Kashmir decided upon a standstill agreement with both the new-born states.

Mass disorders in India and Pakistan occurred after partition, but in Kashmir they had erupted a year earlier. It was, however, the principality of Poonch which became the storm centre, a rugged mountainous tract which had provided 60,000 soldiers in World War II. On return from the war, these soldiers took a hand in inciting the local population, mostly Muslim, against the Hindu Maharaja. At the time of standstill agreement, Pakistan took them under its aegis. Pakistani regular officers organized them into a force and also incited tribesmen from the north-western frontier. This was the beginning of Pakistan's first armed intervention in the State.¹

From Tirah and Waziristan the tribals began their trek, so that on October 22, 1947 they were in Domel within the Kashmir frontier. The State troops, never particularly bright, were overpowered. Following the Jhelum valley trail the tribesmen overran Uri, passed through Mohura, where they burnt the hydro-electric power station, and on October 26 touched Baramula in a holocaust of loot, massacre and rape, committed in the grand, old tribal style.

Baramula to Srinagar is a 30-mile road, lined with poplars from Mughal days, which the tribesmen traversed with gaiety and gusto, reaching Srinagar the following day. Their immediate attempt was to capture the airfield, but here they met their first reverse at the hands of Indian troops who only a few hours earlier

¹ It was only in July 1948, on the visit of a UN team, that Pakistan admitted the presence of its troops in Kashmir. Five years later, the Chief Minister of N.W. Frontier Province claimed from the Pakistan Government a sum of Rs. 68,000 he said he had spent out of his pocket to facilitate the tribal invasion of Kashmir. Ref. Joseph Korbel, Danger in Kashmir, Princeton University Press, 1954, p. 95.
had been flown in. For Delhi had been alerted. Meanwhile, the Maharaja of Kashmir applied for accession to India, which was accepted.

Three hundred and thirty men of the First Sikh Battalion landed in Srinagar on October 27. More re-inforcements followed. By the middle of November the tribesmen were thrown back beyond Uri. Meanwhile there were more incursions and this time down south towards Poonch, Kotli and Mirpur. In Poonch an Indian garrison was locked up in struggle against a conglomeration of Pakistanis, local rebels and tribesmen; it remained a vital strategic centre throughout the subsequent events. To hold on to Poonch was India's principal task. Two divisions were eventually deployed for this purpose, maintained by a long narrow line of communication, partly in mountainous area, from Pathankot via Jammu: the Pathankot-Jammu road, built in the fall of 1947, played an important logistic role in the defence of Kashmir.

Pakistan could have made a bid to cut off this link, but did not because India had air superiority and because of the fear of retaliation in other fields. The main Pakistani strategy was to pin the enemy down to Poonch, so as to gag its operations elsewhere. In this Pakistan did well. Only once, in May, 1948, did the Indian army launch an offensive, by striking against Uri and by an outflanking move towards Tithwal. But the offensive did not receive sufficient support. At Tithwal Indian advance was held by a Pakistani Brigade which was moved up through a difficult mountainous terrain. From this time Tithwal became a point on the uppermost line of Indian control of Kashmir. From around this town the tribesmen made another dash, taking a round of the Kashmir valley and appearing at Zoji La. Here, they were met and turned back by Indian troops with the help of tanks which had been brought up with speed and efficiency.

Meanwhile, the entire north-western region of the State, including Gilgit Agency, broke away and fell into Pakistani hands.

Pakistani pressure on Poonch was intensified by the construction of a road through Palandri towards the town of Poonch and withdrawal of a part of their forces from the Lahore front. Instead of one there were now two divisions in the area, which, however, were harassed by a number of bombing attacks by the Royal Indian Air Force, but not prevented from their objective
of a mass assault on Poonch. This assault came in December, 1948, and took the shape of a 36-hour bombardment of Indian ammunition dumps and encampments. India might have hit back not only in Poonch area but elsewhere. Meanwhile forces were at work in New Delhi, Karachi and New York—and British officers, both in the Pakistani and Indian armies, were a part of these forces—to bring a stop to this "absurd war." On 1st January, 1949, a cease-fire was declared.

**Political Aftermath**

In January, 1948 India took the Kashmir case to the Security Council of the United Nations. In the flush of its new found freedom and faith in the U.N.O., India thought there was nothing more worthy of presentation to this body than the situation of aggression in Kashmir. Pakistan admitted no aggression.

For three years and three months U.N. luminaries wrestled with the problem. The United Nations Commission for India and Pakistan was appointed, followed by the appointment of special representatives. Their plans included complete or partial demilitarization, plebiscite for the State or plebiscite only in certain parts of the State; stabilization of the cease-fire line; and partition. The only concrete result was the demarcation of the cease-fire line under supervision of U.N. military observers. The job was finished in July, 1951, but, with headquarters at Srinagar and Rawalpindi, the team of observers stayed on from year to year, the only fixture in a shifting mass of representatives, councillors and professional advisers assembled under the U.N. to solve the Kashmir dispute.

Meanwhile, India intensified its efforts to make Jammu and Kashmir an integral part of India. Kashmir Constituent Assembly, elected in 1950, ratified Kashmir's accession to India. The State held its first elections in 1957, second in 1962, and third in 1967. This was in line with the elections in the rest of the country. Most, though not all, of the Indian laws were made applicable to Kashmir; communications between India and Kashmir developed fast; and Indian economic planning took Kashmir fully within its ambit.

Pakistan on its part sought to integrate occupied territory into
the state of Pakistan. "Azad Kashmir" government became but a limb of Pakistani Foreign Office. This territory was carved mostly out of the district of Poonch minus the prestigious Poonch town. With a population of three-quarter million and area 5,000 square miles, "Azad Kashmir" is a frontier military tract. A few miles north of the cease-fire line one of its districts, Muzaffarabad, juts into a region which is a part of the State but is directly controlled by Pakistan. Two of its more important bases, Gilgit and Skardu, lie here, connected by a newly constructed road; and in the Skardu area at Marol Top is the advance base, only 5 miles from the cease-fire line. The thick Tithwal forest is Pakistan's natural barrier and the vast Deosi plain, in which Skardu lies and which is at an altitude of 12,000 feet, a remarkable strategic stretch, is its training ground for high altitude warfare.

Meanwhile the Kashmir question drifted into international politics. Russia declared that Jammu and Kashmir was a part of India, and Soviet veto in the Security Council provided India the only standing support against cold war. By acquiring bases in Pakistan, on the pretext of containing communism, the United States turned this country into a special protege.

After years of quiescence, Pakistan resurrected the Kashmir problem in the Security Council in May, 1962. Despite invasion by China, India stood firm. Political battles continued. By 1964, the Security Council had debated on Kashmir more than a 100 times.

Meanwhile Pakistan took another step to consolidate its presence in occupied Kashmir by signing in March, 1963 a boundary agreement with China, involving a frontier of 250 miles from Karokaram Pass to the Afghan border. This was said to be provisional till the final sovereign authority over Kashmir was determined.

The 14-month Indo-Pakistani war was of a very limited character and fought only intermittently. Neither of the two countries was prepared to fight, as it had erupted so suddenly in the wake of the shambles of partition. The two armed forces were headed separately by two British Commanders-in-Chief, who were constantly in touch with each other by telephone.

It was not much of a war but India could have saved it from
slipping into a stalemate. While the Indian forces were not in good shape, they were in every respect superior to those of Pakistan which were even in worse shape. India was hesitant and on the defensive, and its one solitary offensive never got into swing for lack of logistic support. The real stake lay in the retention of the whole of Jammu and Kashmir as a bulwark of Indian defence astride Central Asia, but of this the Indian leadership showed no conception. By taking recourse to the Security Council, Indian leadership got bogged in an international slush, from which it could not drag itself out; and with eyes glued to the United Nations it never mustered all-out support for the military operations in Kashmir.

2. THE WAR WITH CHINA

Thirteen years were to elapse before India faced another war, this time with China. By then India had made some headway militarily, but not enough. Much water had flowed down the Indus of Pakistan and the Tsang-po of Tibet, but not enough down the Ganga.

The cease-fire line became almost a part of the landscape of Kashmir. Pakistan not only consolidated its position in occupied Kashmir, but by collusion with China and military alliance with the West was even in a position to challenge India's presence in the State. The conception of this territory as a bulwark of defence was further eroded, and Indian leadership seemed to be ready to bargain on the division of the State on the basis of the cease-fire line. Meanwhile, the phobia about Pakistan made India almost forget the rise of China.

Mao Tse-tung swept to power in 1949 and one of the first acts of his armies was to occupy Tibet and thus render the frontiers of China contiguous to those of India. The new border phenomenon could be viewed from three angles: perhaps it had to be dealt with by force, perhaps it was a part of the revolutions of India and China and demanded understanding, perhaps it could be sorted out in a neighbourly spirit.

India was neither militarily nor mentally prepared to look at it from the first angle. But the remaining two angles offered the paths of least resistance. In a matter of five years after Com-
munist China's rise to power, India had its presence eliminated from Tibet and then began to run into difficulties with Nepal, Bhutan, Sikkim and the hilly parts of Assam. As subsequent events proved, India's mental cast showed little response to the power factor, there was not enough rapport between the civil authority and military authority, and defence of the border was almost neglected.

**Frontier Dispute**

China invaded India in 1962 at Kashmir and Assam, the western and eastern ramparts of the northern border. The seeds of trouble were sown in 1950 when China occupied Tibet.

From that year the Chinese began to use with more than usual frequency the route through Aksai Chin in Kashmir. Once only a track, it was from March, 1956 to September, 1957 converted into a motor road and thus served their purposes: it connected Sinkiang with Tibet completing a line of communication; it brought the southern border region of China within a calculated system of frontier defence; and it became the symbol of Chinese possession of a part of Ladakh.

India first protested in 1958. Meanwhile there were skirmishes between Indian and Chinese patrols. In 1960 there was appointed a team of officials of the two Governments in order to examine the material on the boundary and submit a report. The report was submitted in February, 1961, but the old divergences remained.

Dividing the border into three sectors, the report gives the viewpoints of India and China in respect of their claims. Even though it was the Bara Hoti plain in the middle sector that sparked off the border dispute, major differences arose in the western and eastern sectors.

According to India, the boundary in the western sector begins from the tri-junction of the boundaries of India, China and Afghanistan at longitude 74° 34' east and latitude 37° 3' north, descends east through the watersheds of Hunza River of the

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Indus River system, Qara Chukar River of the Yarkand River system, along the crest of Aghil mountains, to Karakoram Pass. From this pass it ascends to the Kun Lun mountain and then south-west descends to Lanak La. Thereafter, passing through the middle of Pangong Lake and Spanggur Lake, and further southward 5 miles southeast of Demchok, it reaches Gya Peak.

According to China the boundary runs along the Karakoram range, between the watersheds of the Tarim River of Sinkiang and the Indus River of Kashmir, upto Karakoram Pass; way off that pass, it turns south-eastward to the Shyok River and then down to Kong Ka Pass. From that pass it runs south through the western half of Pangong Lake, crosses the Indus River at latitude 35° north and reaches the junction of China's Ari district and Punjab.

The difference between the two delineations was mainly from Karakoram Pass. From this pass, according to India, the line mounts to the Kun Lun mountain and runs along its crest, while according to China it comes down and travels along the western fringe of Aksai Chin. There were other small disputed areas also, such as Demchok, but it was in Aksai Chin, an area of 12,000 square miles, that lay the rub.

The Indian description of boundary in the north-eastern sector is this: from the east of Nepal, passing through a watershed, it joins the Great Himalayan range, and then, following its crest, crosses the Subansiri River and proceeds just south of Migyitun. Further east it mounts the bulge of Kangri Karpo Pass, from where it descends till it crosses the Lunit River and joins the tri-junction of India, Burma and China boundaries north of the Diphu Pass.

By the Chinese description the boundary begins from the tri-junction of China, India and Bhutan—not Nepal—from where it proceeds east almost along the foot of the Himalaya, crosses the Subansiri River some 40 miles below the Indian point of crossing, and then cuts across the Brahmaputra River before touching a point below Nizamghat. From Nizamghat it enters mountainous terrain, and then following the Tsayul River valley it reaches the tri-junction of India, China and Burma.

The main difference is that whereas the Indian line is along the Himalaya's crest, the Chinese is along its foot. The Chinese
claim thus includes the whole of North Eastern Frontier Agency, an area of 30,000 square miles.

*Geographical Setting*

Ladakh, the scene of operations in the north-west, is 37,000 square miles, or two-fifths of the State of Jammu and Kashmir. Its population is, however, only 100,000, which is an indication of its uninhabited wildernesses. Its geographical features are determined by high elevation, proximity to Central Asian region, and distance from the sea which deprives it of the effects of the moisture-laden monsoons. The floor elevation is 11,000 feet but the surrounding features are higher, ranging from 14,000 to 19,000 feet. It is in these higher regions—Demchok, the Chushul-Spanggur-Pangong plateau, the valley of Chang Chenmo, the Depsang plain, Daulat Beg Oldi—that most of the fighting took place.

Ladakh is a harsh land, bare, scrubby and wild, where winds blow constantly with varying speeds. Summers are sunny, when days are warm and nights pleasantly cold, but in winter everything freezes, which includes rivers, lakes, oils, foodstuff, electrolyte in storage batteries and perspiration. While a strong, biting dryness, the result of winds and scanty rainfall, fills the landscape, there are however meadows and brilliant oases here and there. Patches of snow hanging on the upper reaches of the plateau are visible, from which streams rise in summer. Living conditions are difficult but not forbidding, so that life in the shape of human beings, yaks, donkeys, flies and butterflies is possible in selected areas. It is sustained partly by habit and partly by contact with outside world. At 11,000 feet one touches the critical point when breathing begins to be difficult, but this is remedied by acclimatization. Ladakh does not produce much of the wherewithals of life, like foodstuff, for it has neither the fertility of soil nor enough water nor warmth for growth; hence the imperative need of provisions from bases in India or China. No armies can operate in Ladakh without a proper supply base.

Looked at from India, Ladakh lies beyond the Great Himalayan range and depends upon mountain passes for access which are not many. The main Indian route is from Srinagar to Zoji La
over the Himalaya, Fatu La over Zanskar, and on to Leh. The most critical point on this route is Zoji La which in winter collects enormous drifts of snow upto 80 feet high, defying clearance and rendering passage impossible in winter months.

In 1948 a jeepable road from Srinagar to a little beyond Zoji La was constructed to facilitate Kashmir operations; later this was extended to Kargil. In 1960 a light vehicular road was constructed from Kargil to Leh which, on the eve of the Chinese attack, was extended upto Chushul, India's advance post. Five hundred miles south-west of Leh is the Indian rail-head at Pathankot, the principal supply base, both for Srinagar and Leh, unless goods are transported directly by air.

The principal supply base of China would be Urumchi in northern Sinkiang and Chamdo in eastern Tibet. Aksai Chin was connected, before the battles were joined, with both these railheads by roads, through Kashgar-Yarkand on one side and Lhasa on the other. However, China had done considerable stock-piling in Sinkiang and Tibet in the interests of security in these two turbulent regions, and also laid out a network of roads in border areas as a part of special military programme. Through Aksai Chin, the Indian territory, a 100-mile road, connecting Gartok with Yehchung, was completed in 1957. Another road was constructed in 1959-60, from Lanak La to Kong Ka Pass to Qara Tagh Pass into Sinkiang, almost parallel to the main Aksai Chin Road.

With these as the base further advances were made westward into Depsang Plains, facilitated by a 40-mile motorable road to the upper Chip Chap River.

Compared to China, India suffered from some disadvantages. Roads had to be constructed through a more difficult terrain. Near Kargil, the Indian route was only a couple of miles from the cease-fire line with Pakistan, so that it could afford no security of movement. In 1961, India was able to establish a post at Daulat Beg Oldi, 17 miles south-east of Karakoram Pass, but the link with the base could not be made firm.

A thousand miles away, the North Eastern Frontier Agency (NEFA) was the second scene of operations. Its northern boundary of about 800 miles from Bhutan to Burma runs along Tibet. The Agency is divided into five administrative divisions of
Kameng, Subansiri, Siang, Lohit and Tirap, the last touching Burma and Nagaland; and has an area of 30,000 square miles inhabited by 400,000 people. The River Brahmaputra flows over a short distance through it, and then courses through a valley not far from its southern boundary.

Most of NEFA gets the full blast of monsoons from the Bay of Bengal and rainfall as high as 200 inches; northward, however, the rainfall is not so menacing and is reduced at places to 40 inches. From April to October is thus the monsoonal season, not opportune for military operations. It snows in winter but never so severely as on Zoji La in Ladakh, and not everywhere. Cold is a problem but again not forbidding as in the north-west. Both Ladakh and NEFA have however passes at high altitudes, some at 16,000 feet. Mountain spurs and narrow valleys make flying conditions equally difficult in both areas, but in NEFA air dropping is beset with greater uncertainties due to thick forests, and demands superior skill on the part of flyers.

The Battles

Battles of the border do not make a long story. In the first week of September, 1962 Chinese infiltrations into the border commenced, followed by skirmishes with Indian forward posts. These continued till October 20, when full-scale attacks were launched for 3 days. A lull followed and attacks were resumed on November 17. Four days later the Chinese declared unilateral cease-fire.

In Ladakh the attack was three-pronged. Situated at the foot of Karakoram Pass, Daulat Beg Oldi was the first target. From Qara Tagh Pass there ran an arterial road leading towards it, and this was the Chinese supply line. On the Indian side, however, this post had no communication with the base other than by air; its airstrip at a height of 16,400 feet must have been one of the highest in the world. Manned by bare 3 dozen men, whose main job was not defence but to keep the flag flying, the post held precariously. Three days after the fighting began, on October 22, it was abandoned, and the holders retreated, with whatever they could carry, across another pass, even higher, trekking back over the frozen River Shyok. A similar fate befell the posts in the valleys of Rivers Chip Chap and Galwan.
Compared to northern pockets, the southern-most sector covering Demchok was better defended, at least because the defence lasted a week. Resistance ceased after the posts at Jara La and Chang La were overpowered. The important Indian town of Demchok, situated almost on the international boundary line, fell into Chinese hands.

The last Chinese thrust was directed against Chushul, the important Indian air strip at a stone's throw from the Tibetan frontier. It is a bleak, sandy stretch at a height of 14,230 feet, nestled in a narrow valley close to the Spanggur Lake and dominated by barren hills. It had a road link with a point called Dungti, which, however, lay within range of Chinese artillery fire and was rendered unserviceable. Helicopters thus provided the main link. Chinese roadways, on the other hand, linked their forward points with Rudok in Tibet, a principal supply centre. The attack on Chushul began on November 18, but earlier the Chinese troops had already captured Sri Jap on the shore of Pangong Lake. Both the lakes were thus dominated by them; on being frozen these lakes could take on light vehicles and thus become a natural highway.

In the battle of Sri Jap the Chinese deployed P-76 Russian built tanks, which gave a forecast of the battle of Chushul, but terrain was a complicating factor. Two hills on the eastern side of the valley—Gurung and Mugger—were held by Indians, who thus commanded the gap intervening between Chushul and the Spanggur Lake. Six miles south-east Indians also held another important strategic post at Resang La. Gurung, Mugger and Resang La were thus the Chinese targets in the first instance, sought to be captured by wave after wave of attacking troops carrying automatic rifles and supported by artillery. With their meagre machine guns the Indians were no match. Battles continued for a day and a half under sub-zero temperatures when the posts fell. Then came the turn of Chushul itself which was shelled heavily.

Meanwhile Indians took another position on an adjoining hill at a height of 16,000 feet where they succeeded in hauling some pieces of heavy artillery. The hutsments at the edge of the Chushul airstrip were destroyed and the field was badly damaged, but after cease-fire some equipment could be retrieved. Whether the
airfield could ever have held on must remain an unanswered question for on November 21 the fighting ceased.

Late in August, 1962 one could have observed with proper intelligence, which India did not possess, a substantial, unusual movement of Chinese troops along the lateral road running parallel to the McMahon Line, starting from Rima and running westward to Tibet and Sinkiang. Troops were also marching from the valley of the R. Tsangpo southwards towards the Indian borders. They concentrated at three points; at Le and Tson Dzong near the Bhutan border to march into Indian territory through Thag La and Bum La, at Migyitun in the middle of the McMahon Line to capture Longju, and at Rima at the eastern extremity to pounce upon Walong. They took probing actions during September, and mounted heavy attacks on October 20 and again on November 17. The cease-fire was declared on November 21. The story was the same as that of Ladakh, only it was more bloody as the scale of fighting was heavier.

In the Thag La-Bum La sector the Chinese operated broadly along the lines commencing from these passes and running down to Namkha Chu, Dhola, Towang, Jang, Tse La, Dirong Dzong, Bomdi La and the foothills; thus they traversed the entire slope of the Himalaya from crest to foot. It is 16 road miles from the border to Towang, 25 from Towang to Tse La, and 140 from Tse La to the foothills; straight distances are less. There was no road from the border to Towang, a passable connection between Towang and Bomdi La, and a motorable road from Bomdi La to the foothills.

The Chinese roadhead was at Le, 10 miles north of Thag La. Mounted from here, the first Chinese thrust resulted in the elimination of Indian resistance at Namkha Chu and the fall of Dhola, at the foot of Thag La. Then Towang was captured. During the lull which followed, a road joining Bum La on the border with Towang was constructed, an enterprise of two weeks. With the supplies which were brought on trucks Towang was secured and strengthened as a forward springboard.

The second phase of the offensive began on November 17, but meanwhile Chinese vanguards crept to the rear of the Indian troops at Tse La and drove a wedge between this strategic pass
(14,000 ft.) and Dirong Dzong in the valley (6000 ft.), and between Dirong Dzong and Bomdi La (8500 ft.). When all was ready, a simultaneous attack was launched on Tse La, Dirong Dzong and Bomdi La. Tse La was caught in a pincer and at neither of the remaining two posts was there much resistance. The Tse La brigade trekked back, only to be confronted with a closed rear pocket, and was subsequently ambushed and overwhelmed. Elements of Chinese forces bypassed Bomdi La, and some of them reached as far down as the outskirts of the foothills. In exactly one month, therefore, the Chinese negotiated the entire Himalayan slope and descended upon the Indian plain.

While there was a road connecting the Indian base with some of the forward posts facing Thag La, there was none connecting Walong at the easternmost edge, which is 15 miles from the border. The nearest roadhead was at Tezu, 100 miles away, and supplies were almost completely dependent upon air-lift; the Walong airfield was fit only for Otter aircraft. Even this restricted means of supply was cut off when the Chinese rendered the field unserviceable by artillery barrage. The Walong brigade then began to retreat down the Lohit valley towards Hayuliang. The Chinese pursued and pressed their advantage 40 miles beyond Walong, and then halted in obedience to the cease-fire order.

In the middle sector, apart from the occupation of Longju, there were no military operations.  

A week after the cease-fire, Prime Minister Nehru received a letter from Prime Minister Chou En-lai, which stated:

As a result of the cease-fire by the Chinese frontier guards on their own initiative along the entire Sino-Indian border from 00.00 hours November 22, 1962, the unfortunate border conflict between our two countries has come to a halt, and the situation has been eased somewhat. Beginning from December 1, 1962 the Chinese frontier guards, in pursuance of the Chinese Government’s decision, will withdraw on their own initiative all the way to positions on the Chinese side 20 kilometres behind the line of actual control as of November 7,

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3 In The Untold Story, Lt. Gen. B. M. Kaul, one of the corps commanders of the NEFA front, gives a diary of events in his command from 8 September to 21 November, 1962.
1962.... This is to say, they will not only evacuate the areas they reached in their recent fight in self-defence but will withdraw to position far behind those they held on September 8 or October 20, 1962.... I would like to stress that withdrawal by China alone of its frontier guards beyond 20 kilometres of its side of the 1959 line of actual control cannot ensure the disengagement of the armed forces of the two sides, nor can it prevent the recurrence of border clashes. On the contrary, in case the Indian side should refuse to co-operate, even the cease-fire which has been effected is likely to be upset.4

*Tactics*

From this point onward the Sino-Indian battles shifted from the military to the political plane.

It appears that in those days China had fourteen divisions based in Tibet, more than the strength of the entire Indian army, commanding good mobility and efficient central direction. Three to four divisions operated in each of the two theatres, often a brigade having been thrown in against a battalion. Long preparation had preceded the massing of troops and material, and this included a network of intelligence in India's border areas. Soldiers were acclimatized to high altitudes, if indeed it was necessary, because a good many of them hailed from regions of high elevation. Neither the forests nor the gorges of NEFA were much of a problem, because of guerrilla training imparted to the Red forces. A network of roads, laid out as a result of years of enterprise, was decisively favourable. Close to the borders, bunkers were found to have been built, the front-line soldiers' homes.

The soldier's wear was shabby but warm and padded, and supplemented as occasion arose, by the olive green of the dead Indian soldier or garb of the native tribes, which caused deception. His food was simple; not for him hot meals and rum rations and "cakes and ale". Movements in the operational theatre were determined by the exigencies of the situation. Groups of men prowled causing little sound and leaving behind no trace, and took Indian posts by surprise. Some, though not all, the attacks

were made in waves in overwhelming numbers employing sound tactics; shouts, whistles and explosions were frequent precursors of attack. "We have to use close-fighting, night-fighting, or trench warfare to defeat the enemy. Therefore we must pay special attention to training in close combat," a Chinese general had said in 1961. In the border battles, the tactics of close combat were fully used.

Indian wireless communications were cut, and sometimes the Chinese broadcast counter orders in Hindi. As in Korea, so in NEFA, each rifleman in the attacking wave was supported by two others carrying ammunition and lighter weapons. Earth-moving machinery and automatic saws were two of the more modern tools operated by a special labour corps which accompanied the troops. This labour corps performed also other support functions. The lugger of heavy equipment, it carried guns and wheeled transport over high elevations and helped build roads, so that the 16-mile road from Thag La to Towang built in a fortnight was certainly a record.

The Chinese thrust had all the air of blitzkrieg, with the difference that it was not mechanized.

India lacked almost everything that China possessed. A bulk of its forces was pinned down on the borders with Pakistan, and so not much could be spared against China; its army had never been big. Terrain was unfamiliar and troops were unacclimatized. There was not one good road which could be relied upon for round-the-clock bulk supplies. Air transport was limited and conditioned by weather. The ancient type rifle of the Indian soldier was no match for the Chinese weapons. Indian commanders were not tuned to the kind of warfare in which they were plunged, and not all of them were men of suitable calibre or experience. Since the forward posts were poorly manned and equipped, what, one might ask, was the point of putting up defence at such a distance from the base? Tactics were faulty and intelligence was desperately bad.

An official enquiry investigated into the reverses incurred by the Indian army both on the Ladakh and NEFA fronts. This went into the question of the strength of the forces, planning and preparedness at the time of attack, and reviewed the actual operations. The report was not published, but the Defence Minis-
ter made a statement in Parliament on September 2, 1963, couched in general terms, drawing conclusions and lessons but not relating them to the details of operations.

This was done under five heads: training, equipment, system of command, physical fitness of troops, and capacity of commanders to influence men.

Basic training was sound, the Defence Minister said, but it was defective in many fields. It was not orientated towards mountain and jungle warfare and, in particular, did not include knowledge of Chinese tactics; the army had few high altitude and jungle warfare schools. Since the commanders were not conversant with mountain warfare, suitable leadership was not forthcoming. There was an overall shortage of equipment both for training and operations, and the difficulty arose not only in the paucity of material but the absence of the means of transport; there were few properly built roads, too inadequate for the fast rate at which troops had to be inducted. The system and chain of command was alright, but was not exercised in an accepted manner at the various levels; the higher army formations, it was found, interfered with tactical details and the initiative of local commanders. Troops stood well the rigours of climate, although officers in the middle age group showed incapacity to maintain standards of physical fitness. Finally, general standard among junior officers was good, at the level of commanding officers fair, and at the higher levels poor. The Defence Minister also said that intelligence was unsatisfactory and staff work of low standard.

"In that period of less than two months last year, only about 20,000 of our troops were actually involved in fighting," said the Defence Minister.

3. THE SECOND WAR WITH PAKISTAN

The second round of fighting between India and Pakistan over Jammu and Kashmir began in August, 1965. By now India had begun to live with the border and not merely philosophize about it.

The Prelude and the Kutch Episode

During the preceding fifteen years, the cold war between India and Pakistan had never ceased and was carried on relentlessly
at international forums, through press and radio, and across the frontiers. Of this the last variety was the most conspicuous, accompanied by ceaseless firing and border violations. The fact that the border violations went on increasing from 400 in 1963 to 1,600 in 1964 and as many as 1,800 during the first 7 months of 1965 provided at least one sure indication of the impending showdown.

There are some plausible reasons why Pakistan selected mid-1965 to force a decision by military means.

In 1963, after the Chinese attack, India had enhanced its defence budget. A year later it had embarked on its Five Year Defence Plan, which, by 1965, had just got going. An important part of the plan was to be executed with the assistance of the United States and the Soviet Union. The U.S.A. (and Britain) had promised the establishment of small arms ordnance factories and supply of equipment for air defence and mountain logistics. By 1965, only a part of this assistance had become available, while the rest was being processed. Russia had promised 3 squadrons of Migs, which had begun to arrive in June, 1965 in dismantled form, but their assembly would take time. By the same date, there came also the first shipment of Soviet tanks; some time would elapse before the whole consignment would arrive and was pressed into service. Negotiations for the supply of Russian submarines were still under way. It was only in August, 1965, after many years of slow thinking, that India had at last evolved a comprehensive set up for inter-State border security in the shape of the Central Border Forces; again, some time must elapse before this Force could be adequately manned, equipped and deployed.

One episode in particular, very encouraging to Pakistan, brought the simmering tensions to the surface, the Kutch fighting.

The trouble over the border between India’s Rann of Kutch and Pakistan’s Sind began in January, 1965, although the seeds of it were deeper down in time. During the Indo-Pakistan talks in 1960, the Kutch-Sind border dispute was one of the major points that had remained unsettled. Some correspondence between the two countries had meanwhile taken place but to no effect. Under the ground rules then framed the border was under patrol of the police forces of the two countries. The trouble erupted when the Indian police challenged the Pakistani police for estab-
lishing a 20-mile track between Surai and Ding lying on the Indian side of the border.

The Rann of Kutch is a marshland 320 miles long and 50 miles wide, lying on both sides of latitude 24 degrees north. For six months, from May to October, the monsoons whip in the waters of the Arabian Sea, so that the Rann is flooded; otherwise it is completely desolate and uninhabited. It is better approached from the side of Sind than Gujarat. In 1964 it sprang into prominence because of reports that it had oil.

India claimed that there was no territorial dispute, as the boundary was well established along the northern edge of the Rann and needed but to be demarcated. Pakistan claimed that it ran along the 24th parallel, thus involving an area of 3,500 square miles.

When intrusion into the Surai-Ding track was challenged, Pakistan moved its armed forces to the border, overwhelmed some of India's forward posts and penetrated a few miles into the Rann of Kutch. Meanwhile, the Indian forces also arrived, and the two clashed during the month of April. The fighting was not so important as the aftermath. On the intervention of the British Prime Minister, a cease-fire was declared on July 1, 1965 which was followed by the Kutch Agreement. According to the Agreement, Pakistan gave up the three localities it had captured—Kanjarkot, Point 84, and Biar Bet—and was permitted to patrol the disputed track, while India removed its forces from Sardar Post and Vigokot; and it was agreed that the matter be taken up by an international tribunal whose award would be final and binding on both parties. Announced in February, 1968, the tribunal's award gave 90 per cent of the disputed area to India, but Pakistan did manage to get the remaining 10 per cent.

The moral was clear. India had not provided for the contingency when its territorial integrity would be challenged by the military instead of the police. Despite representations of the Gujarat Government, the Centre had built few roads in the Rann. It moved its army haltingly and too late. Militarily, it was unprepared and met with a reverse. As usual, it complained that it was an aggrieved party, forgetting that in war there is either a defeated party or a victorious party, and no third party. From a position of strength Pakistan pushed India
into the acceptance of an international award over a matter relating to what it had been proclaiming was its own territory. This was a moral which could also be applied to Kashmir as to Kutch.

**Pakistani Infiltration**

India’s frontier with West Pakistan is 1,300 miles, running along the western borders of 4 States, Jammu and Kashmir, Punjab, Rajasthan and Gujarat. Barring Gujarat, fighting flared up across the borders of the remaining three, comprising a total front of over a 1,000 miles.

From the point of view of terrain this front has three distinctive divisions. Jammu and Kashmir is mountainous and forested, suitable for guerrilla infiltration and having prominent features which a commander would try to capture to secure a strategic advantage. Punjab is a plain, suitable for positional warfare with the help of massed infantry and heavy armour. Rajasthan has the longest border and is sandy, ill-fed with roads, thus suitable for dispersed operations. These factors influenced the character of fighting.

During the period of flare-up, the cease-fire line (CFL) was of course forgotten. This line takes off from a point very close to Chhamb (Jammu) and meanders northward past Mandhor, Poonch, Uri, Tithwal and Karon, whence it turns sharp to the east, towards Kargil, traversing altogether a distance of 500 miles. In 1965, 45 observers of the United Nations Military Observer Group kept vigilance on the line, but were never effective; the non-militarized belt of 500 yards on each side of the line was violated almost everywhere.

This second Indo-Pakistani war is sometimes stated to have lasted for 22 days, from September 1, when the Pakistani army crossed into Chhamb, to September 23 when cease-fire was declared, but this is not correct. In the Tashkent Agreement, which finally brought hostilities to an end, the respective forces were required to take positions as on August 5, 1965.

This date was provided by the leader of the Observer Group to the U.N. Secretary General. “General Nimmo has indicated to me,” said U Thant in his report to the U.N., “that the series of violations that began on August 5 were to a considerable ex-
tent in subsequent days in the form of armed men, generally not in uniform, crossing the CFL from the Pakistan side for the purpose of armed action on the Indian side.” In point of fact these armed men—guerrillas—began to infiltrate from August 1.

Infiltration was for the purpose of clearing the decks for political control over a vital part of the Kashmir valley in which Srinagar is located. This involved the capture of airfield, radio station and electric power house, and dislocation of roads leading to the capital or to important military bases. A revolutionary council was then to be set up, with the assistance of a few local figureheads, who would invite Pakistan for assistance; that would be the time for Pakistani armed forces to move in. August 9 was the D-day, a festival date, when infiltrators could join processions and cause mass confusion.

The “Gibraltar Forces”, as they were called in Pakistan without any particular reason why Gibraltar should have been dragged in all the way from the Mediterranean, consisted of about 50,000 men divided into 10 forces of brigade-strength and further subdivided into smaller units. The first wave of infiltrators comprised perhaps one-sixth of this number. They carried rifles, light machine guns, hand-grenades, ammunition, explosive and radio equipment. They also carried Indian money and a stock of pamphlets. Infiltration took place at various points along the CFL, including Mandhor, Poonch, Uri, Tithwal, Gurez and Kargil.

On crossing the line, a three-fold task was undertaken. Some infiltrators engaged in setting up Inqalab Committees and Intazamian Committees (Revolutionary Councils and Administrative Councils). Others began to site supply centres and strongholds. A majority of them thrust forward in the real guerrilla style.

An indication of what these last combatant columns accomplished is provided by the report of the Chief Military Observer of the U.N. Group to the U.N. Secretary General. Of the many incidents which took place during August, he could report only on 23, most of which were caused by infiltrators. These included attacks on Indian H.Q. formations, pickets, patrols and convoy vehicles and road construction camps, and supply dumps. These also included destruction of bridges and raids on villages. Some towns were occupied, where local administration was set up.

News of infiltration broke out almost immediately after viola-
tion of the CFL, partly through local informants and partly through Indian forward patrols. Indian reaction materialized in three retaliatory measures. Infiltrators began to be searched and rounded up. Infiltration routes were sealed, and in this connec-
tion the capture of Haji Pir Pass and the consequent straightening of the Poonch-Uri bulge was a major achievement. Finally, Indian troops captured Pakistan’s posts above Kargil overlooking the Srinagar-Leh route. India meant to hit back.

And yet the task was not easy. Nearly 600 infiltrators pene-
trated to the suburbs of Srinagar, and their stronghold in the nearby forest could be destroyed only after a major operation. There were swarms of them near Jammu even after the cease-
fire. They had also to be pushed back from Zoji La.

Altogether the “Gibraltar Forces” did not have much success. Initial secrecy could not be maintained. Contrary to expectations, local inhabitants gave little support. Air lines of communication, which sought to replace the surface routes now practically sealed, were inadequate and of limited use. Therefore, raiders had the choice to retreat, if possible, or struggle in isolation from the bases, which was difficult. They wanted time, as all guerrillas do, but time ran short, and from surreptitious moves the Indo-
Pakistani confrontation came rapidly to the point of open warfare.

**The Battles of Punjab Plain**

Now we are in the plains where movements are fast, tactics can be developed clearly, objectives can be distinguished, and the entire weight of metal and fire can be brought to bear upon the military situation.

The two sides committed about six divisions each, which in-
cluded two full-length armoured divisions on Pakistan’s side and one and a half armoured divisions on the Indian side, both with heavy and light tanks; Pakistan had more armour and India more infantry. About half of India’s combat air power was employed, comprising principally *Canberra* light bombers, *Gnat* intercepters, *Hunter* and *Vampire* and *Mystere* fighter/bombers, and *Mig* fighters. The remaining ten divisions of the army and numerous squadrons of the air force were deployed in defence against China or Pakistan in the eastern sector. Pakistan employed almost
equivalent air power, which consisted of Canberras, F-86 F Sabre jets and F-104 A Starfighters. Where Pakistan scored was in the speed, fire power and lethal power of its tanks, aircraft and cannon.

The principal theatres of war were north to south, around the towns of Chhamb (Indian territory) and Sialkot and Lahore (Pakistan territory). The distance between Chhamb and Sialkot is 30 miles and between Sialkot and Lahore is 50 miles. Farther south, Indian troops also moved from Rajasthan into Sind.

Chhamb is close to the point from where the cease-fire line begins, and Pakistani forces struck on September 1, 1965, a little east of it across the international frontier. An Indian military installation was also bombed. Chhamb was selected because it was weakly defended by Indians, as Pakistani intelligence had correctly reported and an earlier attack had confirmed; because even though at the foot of the Himalaya, it is suitable for the movement of tanks; and because of its strategic value.

Military objectives were the capture of the town of Akhnur and the town of Jammu, one at the head of India’s western line of communication to Poonch area and the other at the head of India’s eastern line of communication to Srinagar area. With the forces in these two areas thus cut off, the next thrusts would be from the bases of Sialkot and Lahore, one to consolidate the above position by further isolating Jammu and the other to open the way from Amritsar to Delhi along the Grand Trunk Road.

Pakistan could not have been so foolish as to believe that the above strategy would succeed completely. What it hoped was that after the capture of the two vital gateways to the State of Jammu and Kashmir, it would force the Kashmir dispute to negotiations after the manner of Kutch. This hope did not materialize.

India was unable to confront Pakistan in the Chhamb area because of the problem of moving troops to this place from its bases in the Punjab and elsewhere. Instead, on the morning of September 6 the Indian troops struck at the Lahore front, on the night of September 7 they moved across the Jammu-Sialkot border, and on the morning of September 8 they opened another front across the Rajasthan-Sind border.

A three-pronged thrust was made along the Lahore front, from the Wagah border along the Grand Trunk Road, along the
Khalra-Burki axis and along the Khem Karan-Kasur axis. The immediate aim was to reach the Ichhogil Canal. This canal ran between the Indo-Pakistan border and Lahore north-south for 50 miles and had been converted skilfully into a defence barrier with the help of pill-boxes, bunkers and gun emplacements. The Pakistani forces fought back fiercely but lost ground and retreated. About 500 Pakistani paratroopers were dropped in sticks of 60-70 near a forward Indian base but were quickly rounded up. One Indian battalion even crossed Ichhogil Canal and penetrated to the suburbs of Lahore but was summarily pushed back. Lahore airport was within shelling distance of Indian artillery, when hostilities ceased.

While Pakistan lost its territory between canal and the border, it stabilized its defences in this sector and at the same time launched a powerful thrust from Kasur across the southernmost tip of the canal in the direction of Khem Karan. Here it was up against the third prong of the Indian attack in the Lahore area. Having met with some initial successes, the Indian troops were thrown back first to Khem Karan and then 4 miles farther east where in the village of Asal Uttar they dug themselves in. Pakistani troops made altogether five thrusts between September 8 and 10, spearheaded by two armoured brigades moved in one after the other. They were countered by Indian artillery and armour, the latter concealed in tall sugar-cane crop. Indians succeeded in stemming the enemy advance and pushing the enemy troops back to Khem Karan, 4 miles inside Indian territory, when cease-fire was declared.

Sialkot was well-defended with artillery positioned around the city and also in some of the outlying villages. Indian attack was in the shape of a pincer movement directed towards the town. To the north, one arm of the pincer cut the road between Sialkot and the border, and pressed further till the Indian troops were less than a mile from Sialkot when hostilities ceased. To the south, battles, which lasted for 15 days, were much fiercer, involving tanks in large numbers. The principal clash occurred around Phillora which the Indians stormed and captured and from where they moved on to the Sialkot-Lahore railway line which they cut.

The Sialkot-Lahore area, where the fighting was concentrated,
is much too small for full play of air power. The hinterlands of these towns, in India as well as in Pakistan, are well served by roads and railways, which took care of the problem of supply; air transport was conspicuous by its absence even, in the case of India, for reinforcing the troops in Jammu which had been severely mauled. As only small air forces were committed to the war, air operations remained at a low pitch and were further restrained by the fact that both sides avoided the bombing of non-military targets to a reasonable degree. Some of the Indian planes managed to fly over Karachi, while some Pakistani aircraft zoomed over Delhi at night.

Within these limitations the air forces did a six-fold job: air reconnaissance, ground attack in support of the army, interdiction, air cover, bombing of enemy bases, and air defence. Tactical support of the army was the most important aspect of its performance. The IAF went into action right from the day the Indian army took the offensive, and, by bombing enemy tanks and heavy guns in Chhamb, cut down partially the speed of enemy advance. Pakistan’s supply line to Khem Karan was partially disabled by bombing attack. Indian success in the Sialkot sector was considerably due to air cover provided by the IAF. A few dog-fights were also witnessed, in which the tiny Gnat of the IAF scored over Pakistan’s Sabre jets through its sheer technical simplicity. A good many of Pakistan’s main air bases—Sargodha, Chaklala, Kohat, and Peshawar—were attacked by bombers again and again; so were India’s bases at Halwara, Udhampur, Pathankot and Ambala.

While on the western front, Indian and Pakistani soldiers fought violently and fought for every inch of ground, limitations on the war becoming general and total were very much in evidence right from the beginning. Pakistani navy bombarded the Indian town of Dwarka, but withdrew on the appearance of Indian ships, and after this there were no naval engagements.

The eastern region saw little military action beyond the bombing of a few air bases of India and sporadic artillery firings across the border. China did some sabre-rattling, with the allegations that India had constructed military structures on the Sikkim-Tibet side of the border and also stolen 59 yak and 800 sheep. Its three-day ultimatum on September 16 was extended by another
three days, but by then cease-fire was in the offing. Whether China intended to join the fray in collusion with Pakistan may never be known, but its action pinned down half the Indian forces on to the mountains.

There probably would have been no war if these forces had been available; and if these had been available and deployed, Pakistan would have collapsed in no time.
Strategy and Tactics

To review the strategy, tactics and weapons of the two sides we must begin with infiltration. Tribal infiltration into the valley of Kashmir from its mountainous belt is not a new thing, but for the first time in 1965 it was organized systematically by Pakistan. It was a part of military strategy evolved cleverly to implement political policy, after the manner practised in Korea and Vietnam and vigorously propounded by Communist China under Mao Tse-tung.

The guerrilla forces were well equipped, well-trained and well indoctrinated. They did considerable damage to life and property and in certain pockets operated even after the cease-fire. But they suffered from handicaps. After a short while, they ceased to receive full support from Pakistani regular forces which got engaged with the Indian army; they did not receive the anticipated co-operation from local population; and they were efficiently rounded up by the Indian forces.

Indian political and military leaders stated after the war that they were aware of the "Gibraltar Forces" being organized months before the actual infiltration. If that is so, why then they did not take timely action? Even information on the scale of infiltration was too slow to arrive and be digested in Delhi. That showed poor intelligence, but once on the move the army did a good job of mopping up.

In invading India through Chhamb Pakistan displayed initiative and correct appreciation of the geographical factor and India's weakness in that particular sector. But it made some errors. The thrust through Chhamb was not powerful enough. It relied too much on the technical superiority rather than battle-worthiness of its armour, and the battle-worthiness of the armour turned out to be below expectations. Having taken the initiative twice, Pakistan lost valuable time during the first five days of September when Indian political authorities and high command dithered before mounting offensives in Lahore and Sialkot sectors. An outright attack in the Punjab area would have paid dividends in military terms, for which subsequently a political explanation would have been easy to manufacture.

Once again Indian reaction was slow. India had prepared
no defence comparable to that of Lahore. Neither the earlier precedent of Kutch nor the later warnings of the U.N. observers against heavy movements of Pakistani troops east of Sialkot were given due appreciation. Military plans were *ad hoc* and objectives vague so that the generals in the field, apart perhaps from those in positions of control and direction, seemed to be only slugging it through, without an idea as to what to do on reaching Sialkot and Lahore. But once given an opportunity to go to the offensive, the Indian army put into the fray all its moral and material resources. Considering the logistics of Chhamb, the tactic of opening a second front was sound. Whether yet another front need also have been opened in Sind might be questionable, as it overstretched the army's strength.

Two explanations have been given as to why Sialkot or Lahore was not captured. One was that this was not the aim. The aim was to blunt the edge of Pakistan's armed forces without getting into the complications of administering a major town under wartime conditions. The appearance of the Indian army within a whistling distance of two major cities of Pakistan caused demoralization among the civil population as well as among the military and political authorities; President Ayub Khan of Pakistan even cried for American intervention. This was enough for the time being. The second was that the towns were well defended, and any attempt to capture them would have needed more resources than available at the moment, apart from causing damage and suffering. In any case, things had happened too quickly and the duration of fighting was too short for India to define military objectives with precision.

The fact that the towns remained uncaptured for one reason or the other made India lose some possible advantages out of the subsequent political agreement.

The employment of infiltration forces was the only departure from the orthodox mode of fighting that the British had bequeathed to the sub-continent. There was the same divisional pattern of organization on both sides, even though it had undergone changes in Britain, where cumbersome, big divisions had been broken up into smaller task forces and combat teams and new combinations of infantry-artillery-armour and paratroop-helicopter had been introduced. In the light of its experience of fighting
with China and in view of the versatility of the weapons at its command, India was in a position to be more imaginative as well as daring; orthodoxy, inadequacy of training and lack of preparation stood in the way.

Pakistan rushed its tank battalions, without screening their advance and providing adequate infantry support. India employed its tank battalions in both defensive and offensive roles. On defensive, as in Khem Karan, the infantry was in the vanguard, which therefore suffered from enemy’s armour. But once the enemy’s armour penetrated through, it was taken care of by the Indian tanks screened by earthwork, logs and sand bags. On offensive, as in Lahore sector, the Indian tanks pulled back after attack when infantry took over. In the Sialkot sector, Indian forces split the enemy’s infantry and armour, and infantry divorced from armour was like fish out of water.

Weapons and the ability to use them had a considerable influence on the fortunes of war. Broadly, Pakistani weapons were American; also they were comparatively modern and therefore difficult to handle. Indian weapons were British, French and Russian and comparatively older; their diversified character added to maintenance difficulties but their old character added to their facility for use.

Pakistan’s Patton was a medium, fast-moving tank fitted with 90 mm gun, having a range of 21,000 yards, infra-red eyes, automatic gears, and computers for ranging and fire control. All very modern, but wrong information was fed into the computers due to the poor training of the crew; while its low silhouette, muffled by the tall sugar-canes in the Punjab fields, compelled the tank commander to climb up on the turret and thus become a victim of enemy fire. India’s slow-moving Centurian, fitted with a 20 pounder with a little over half the range of 90 mm gun and without any device for night-seeing or automatic feed proved an old reliable horse, used by its rider with care and understanding.

The sophisticated character of Pakistan’s Starfighter F-104 A and Sabre F-86, both fitted with air-to-air missiles, also proved a disadvantage. These aircraft were meant for high-altitude fighting at over 40,000 feet, while ground operations as well as air cover needed flights below 20,000, where India’s Gnat, Mystere and Hunter were more effective. In the later stages of the war, Pakis-
tani planes evaded battle and were confined mostly to a recon-
naissance role.

Indian and Pakistani armies both lacked some of the more
sophisticated weapons in various roles, such as guided missiles
for air defence, self-propelled guns and motorized rocket launch-
ers as field artillery, and guided missiles and ground-fire rockets
for anti-tank purposes. Within these limitations, Pakistan had
more modern weapons supplied by the Americans, while Indian
weapons, mostly of British, French and Swiss origins, were of
older vintage. Here again Indians made better use of their
weapons.

Fired from the air, India’s French-made 5 inch rockets and
20 mm and 30 mm aircraft guns produced better results than
Pakistan’s napalm bombs against tanks and artillery. Pakistan’s
90 mm anti-aircraft gun had a much longer range (13,500 yards)
than the Indian 40 mm Bofor (3,000 yards) but played a limited
role as air attacks were strictly limited.

The infantry-accompanying light mortars were not much used
by either side. Pakistan had a decided superiority with its 155
mm field gun (range 25,000 yards) compared to India’s 120 mm
gun (range 10,000 yards). To some extent Indians made up by
more accurate firing. Compared to India’s 106 mm recoilless
rifles, Pakistan’s 57 mm and 75 mm cannon in anti-tank role
were worthless. This, coupled with wastage of napalm bomb
while used against tanks and inefficiency of the ground attacks
launched by Pakistani pilots, explains Pakistan’s heavy tank
losses. With its 50-calibre machine gun, Pakistani infantry had
a decided advantage over the Indian.

At cease-fire, India had captured 740 sq. miles of Pakistani
territory and Pakistan had captured 210 sq. miles of Indian
territory. India’s performance was better, but not judged by these
figures which are rather indicative of a stalemate.

India did better because it succeeded in closing the principal
routes of infiltration, because it was able to round up most of the
“Gibraltar Forces”, and because it fought its way to within a
couple of miles of two of the principal towns of Pakistan. This
was when more than half of its forces were locked up in the
defence of the border with China. But it could have done still
better if its intelligence had been adequate, if the Government
had been more prompt in deciding upon military action, and if there had been a better combined use of the Army and Air Force in battle.

The Tashkent declaration of January, 1966 which ended the war was made under the auspices of Russia. It contained four statements having military undertones: (1) both sides would withdraw their armed personnel to the positions held prior to August 5, 1965 and observe the cease-fire terms on the cease-fire line; (2) both sides would repatriate the prisoners of war; (3) both sides would discharge their obligations under the U.N. Charter not to have recourse to force and to settle their disputes through peaceful means; (4) both sides would observe the principle of non-interference in the internal affairs of each other.

Russia succeeded in ending hostilities in an area close to its border, where Communist China had begun to poke its nose. It added to its stature by functioning as an honest broker between two Asian nations and, by its strict neutrality, gained the confidence of Pakistan at the expense of the United States. This latter event broke new ground in the Indian subcontinent, for obviously a fresh pattern of power relations had begun to be woven here. As for the fruits of the Tashkent declaration, one is only reminded of the description of a duel by Chesterton—“both the sides fought, both the sides won and both the sides ran away.” The Kashmir problem remained where it was.

4. DEFENCE AND DIPLOMACY

The most remarkable thing about India’s wars is that they have not ended the possibility of further wars. National security is therefore a continuing problem, as indeed it has been ever since anything is known about the mutual intercourse of human beings. But this security cannot be pursued perpetually through fighting, nor is it a matter only of proper adjustment of relations with the neighbours. In respect of its means as well as range it demands indeed a very wide perspective.

In this section it is proposed to examine this perspective, and in order that this examination remains within meaningful limits, the discussion would be confined to the relationship of security problems with foreign policy. An examination of this kind appears
to be desirable even though, strictly speaking, it is not within the scope of the present book, concerned as it is primarily with internal forces and situations. Two preliminary remarks are necessary in this connection. First, we shall seek to present only an outline picture of the relationship, avoiding details. Secondly, this presentation will naturally be in terms of the prevailing world conditions, which, we must appreciate, go on changing from time to time. But it will be related to the geopolitical, economic and military conditions of India as described in the preceding chapters and also to some of the basic factors governing this country's security problems.

Foreign Policy

The foreign policy of a country is concerned with its relations with other countries. These relations may materialize in three forms. Discovering and realizing what is good for them, all countries may pursue together a common aim and function in complete harmony; thus all international contacts may be inspired by a spirit of common enterprise and peaceful co-operation. This has been a great ideal of mankind but so far has not been attained, nor is it likely to be attained in the near future. Conflicts between various peoples will therefore continue to erupt, but they may be resolved by peaceful methods, either bilaterally or through international agencies. In the last resort, when peaceful methods fail, recourse is taken to the application of force. This is war, the third form of foreign policy. Wars are fought to defend frontiers, extend frontiers, or project interests beyond frontiers.

Thus force is an element of foreign policy and some consider that no foreign policy is effective without force.

The principles, mechanism and operation of foreign policy are greatly conditioned by the circumstances of the time. As things happen to be, the main motivations of international relations today have stemmed from that biggest event of the twentieth century to date, the Second World War. This great war destroyed tens of millions of lives and property worth billions upon billions of dollars; and there was not one but a countless number of Rip Van Winkles who woke up one morning to find that the world was different.

All but two of the imperial states who barely three decades
before controlled more than half the world's territory and one-third of all mankind became paupers and had to be fed and financed before they could stand on their feet. All their territorial possessions disintegrated, out of which arose later numerous distinctive political units; these today constitute more than 120 independent states of the United Nations. While imperialism of the old style vanished, anti-colonialism of the most virulent type appeared on the scene.

This was one of the forces behind a new set of social changes which took place in all parts of the world. Another force was provided by communism, a militant complex of ideas and sharp-edged instruments which struck at the old norms of relationship among men. From a bare nucleus in Russia, it swelled and enveloped a large part of Asia and Europe in a matter of three decades, and since then has been spreading further. The second World War also witnessed the birth of one of the greatest technical revolutions in the shape of atomic power which is now powerfully shaping the attitudes of Governments.

All these changes were of a kaleidoscopic character, too shifting, dramatic and complicated to be easily comprehended, evoking variegated responses from peoples and not conducive to a consensus. Thus they contained the seeds of violent conflicts, which in turn gave rise to what has come to be known as power blocs. Power groupings there always have been, but, led by the United States and the Soviet Union, the two power blocs of the post-war period have been the most gigantic of all history. The expansion of the USA over the Pacific and the consolidation of Russian control of a large part of Europe and Asia are by themselves a remarkable phenomenon of the last two decades. At the same time, these two countries have collected round themselves allies, friends, satellites, appendages, hangers-on or chorus boys—the description is immaterial so long as it is remembered that it is the Super Powers who hold the levers of control. At one time, in 1957 when the power blocs were in their heydays, it was customary to divide the world into the West, having a population of 860 million and an area of 22 million square miles, and the East, having a population of 950 million and an area of 14 million square miles. Some parts of the world were not included in this of course, but that did not matter anyway.
If it appears from above that the Second World War generated nothing but confrontations, conflicts and dog-fights, then the impression must be corrected at once. Alongside these there have been absolutely contrary developments and viewpoints.

The break-up of the old empires represents only a negative aspect of the aftermath of war. The positive aspect has been that nationalities have now the opportunity to work out their own destiny and shape their own affairs. The social revolution has underlined not only demands but the need for humanity and justice. In the atom has been discovered the means to destroy as well as add to the wealth of mankind. With all their wickedness the power blocs have provided considerable mutual assistance and security and shown, howsoever obliquely, a path to international co-operation. At the same time peoples know that the blocs do not contain all the ways and means of developing mutual relations and that other paths also exist and may be followed.

It is in this setting of social, political and technological transformations that we must view the foreign policy pursued by India.

This has been called the policy of non-alignment. Its architect, Jawaharlal Nehru, was at considerable pains to define this particular nomenclature, why he evolved this policy and how it worked out in practice. But perhaps a workable and universally accepted definition was found only in September, 1961 at a conference of similar-minded states. Non-alignment meant non-participation in military alliances, refusal to grant bases, and support for movements of independence. Refusal to join defence pacts has been at the heart of non-alignment and its most distinguishable feature, but Nehru was never content with only this aspect of it.\(^5\) He said that world problems could not be viewed in military terms or power systems only and wanted the right of judging them independently as well as on merit. He put non-alignment in the context of India's history, tradition and thought. Instead of extremism he laid stress on balance and instead of conflicts he laid stress on peace.

But non-alignment is only a matter of tactics and has not done away with some of the accepted principles of foreign policy.

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\(^5\) Some of Nehru's pronouncements on non-alignment are found in *India's Foreign Policy*, Publications Division, Government of India, pp. 32, 37, 80, 83, 97.
which, as stated above, include force. National defence and external relations thus hang together in the case of India as for other countries.

Home Base

Defence and foreign policy have one thing common, in that both need a strong home base. In the event of foreign policy coming into operation defence becomes one of the factors of domestic strength, and together with others renders foreign policy credible and effective. Without domestic strength foreign policy is like tinsel, showy but unreal, and also like the proverbial ineffectual angel which beats its wings in the void in vain.

In its turn foreign policy contributes to the strengthening of the home base and consequently to the ability of the people to defend themselves. What are those various pre-requisites for a sound and stable domestic foundation? In India’s present conditions at least five of them are important, and could be easily discerned from a study of the previous chapters.

First, national consensus on internal and external problems. This implies the development of a focus to which people at large can turn and from which they can derive inspiration even in the midst of mutual argumentation and bickerings. Second, a streamlined party system and emergence of clear-cut policies and ideologies within the national consensus. With more than 20 parties and as many as 21 million votes cast for “independents” in the last general election of 1967, the country presents the spectacle of scattered splinters rather than solidarity. Third, strong political institutions, in particular, the Parliament, the Presidency, the relationships between the Union and the States, and the instruments of communication between one part of the country and the other, like language. Fourth, border territories fully integrated with the rest of the country. Fifth, economic development which in quantity, quality and pace must be consistent with India’s resources, targets and demands.

India is developing these basic elements of national strength in various sectors. These sectors are vulnerable, a fact of which foreign powers would take advantage. For instance, with the help of alien conceptions unsuited to local conditions and genius, attempts
may be made to prevent the formation of a national ideology, political parties may be sought to be broken up with slogans of one kind or the other, while national institutions may be ridiculed. Foreign elements may also foster and perpetuate rebel activities in the border areas and stall if not halt the pace of economic development. India's foreign policy cannot be concerned only with the promotion of external objectives. It must also counter alien forces impinging upon internal objectives and seeking to generate conditions of internal weakness and disintegration. It has therefore to be formulated and conducted so as to be able to repel the indirect assaults on national security. At the same time, it must be able to secure the assistance and sympathy of foreign powers for strengthening the home base, of which defence is a part.

Now to identify the defence problems which go hand in hand with external affairs. These may be listed as follows:

1. Production and procurement of defence equipment.
3. Hostility of the avowed enemies.
5. Developments in the areas of tension of significance to India.
7. Relationship with power blocs.

**Defence Equipment**

India's foreign policy is substantially concerned with the procurement of arms and ammunition for the armed forces. It is true the country has some two dozen ordnance factories and seven major defence undertakings, and has also begun tapping the private sector for a number of defence items. But its dependence upon foreign sources is still of a crucial character in certain fields. Contrary to what obtained in the years prior to the Second World War, these sources are now completely controlled by Governments and are no longer with private parties who could be dealt with only on a commercial basis. Military hardware, technical
know-how, and assistance from abroad is a major enterprise which foreign policy experts must undertake.

India depends upon foreign sources for:

(a) Spare parts. These are needed for all the ships of the Navy and most of the aircraft of the Air Force.
(b) Technical collaboration for indigenous manufacture. Presently this is forthcoming from Britain for frigates, tanks, aircraft and aero-engines; from Russia for fighter aircraft; from France for helicopters; from West Germany for diesel marine engines; from Japan for heavy earth-moving equipment; and from a large number of countries for subsidiary articles such as electronic equipment.
(c) Additions to old stocks, such as fighter/bombers.
(d) New weapons and equipment which are or would be available such as submarines, surface-to-air missiles and radar for air defence.
(e) Weapons badly needed but not yet in sight, e.g. long-range bombers.

In procuring weapons etc. from abroad India has followed the policy of non-alignment and thus been able to benefit from sources in the countries of both the blocs. This would be considered a matter of success, but the policy has some serious loopholes.

First, India has by and large paid heavily for most of what it has got and there has been very little in the nature of grants which would have come handy. Secondly, apart from an odd weapon, a bulk of the material received is of old type: if India was able to use old-type weapons well against the superior weapons of Pakistan, it should not be blind to the dangers of Pakistan possessing superior weapons. Thirdly, among the suppliers of weapons from the West bloc, the U.S.A. has very largely kept off India’s beat; and yet it is the U.S.A. alone which can give the more modern weapons. Thus the Indian armed forces are still equipped with major weapons which are regarded as obsolescent among their advanced counterparts elsewhere. Besides, they completely lack some weapons urgently needed to fulfil strategic role.
Nuclear Arms

The military aspect of nuclear arms hinges broadly round big weapons of megaton range and small weapons of kiloton range.

The megaton weapon can now, in one stroke, kill millions of people, destroy property worth thousands of millions of rupees and devastate a whole city. It can be delivered anywhere on earth over 10,000 miles. At present both the two Super Powers possess it. Because of its great destructive potential, these powers may however not commit it to use. This has brought about a condition of deterrence in the world in which a major global conflagration is considered improbable.

Small nuclear weapons now comprise rifle, cannon, howitzer, and missile with power ranging from 50 to 1,000 kilotons. They are tactical weapons for the battlefield; very powerful but capable of inflicting damage which is acceptable.

Neither of the above two developments can give India joy. First of all, the Super Powers themselves do not trust in the efficacy of deterrence, and therefore are engaged in an elaborate and expensive defence programme, including an anti-ballistic missile system. Deterrence implies a certain balance, which however has already received a jolt from France and is liable to be completely upset by China. Secondly, even on the presumption that deterrence would be effective, there is still the threat of megaton weapons being used for political blackmail. With militant Red China the deterrence may in fact provide an umbrella under which aggressive guerrilla warfare may be waged while the whole world watches. Thirdly, India cannot brook the situation of a limited conflict in which its own armed forces with conventional weapons have to confront an enemy with tactical nuclear weapons.

The political aspect hinges round the Treaty for Non-proliferation of Nuclear Arms which in 1968 emerged from the United Nations for ratification. The Treaty was essentially a proposal of the two Super Powers who argued about the dire consequences of the spread of nuclear weapons. While they have sought to prohibit manufacture of nuclear arms by others, they do not propose to be under any restraint themselves. Nor do they have any control over Red China, whose mounting nuclear power coupled with belligerency is becoming India's nightmare.
India's difficulties have arisen because it is dependent upon both the Super Powers for aid and because it is not yet self-sufficient in the machinery and technology of nuclear power.

On the balance India's security considerations would be paramount if not overriding, not only for military reasons but also for internal political reasons. The only real way out of the difficulty is of course to become self-reliant and acquire independence of action; never perhaps was the need for a strong home base to prop an effective foreign policy so evident. So long as that does not happen, India will have to bear in mind that nuclear guarantee from nuclear-weapon states, with which some people have been toying, is neither practicable nor reliable nor available, and that the world's major powers, who possess the resources, have shown no genuine intention to abjure nuclear arms. India may not build weapons now and may never need them, but could not give up the option of building them if need arises. Rightly, therefore, India has not subscribed to the Treaty.

Hostility of Avowed Enemies

As things are at present, Red China and Pakistan have declared their enmity against India and also carried it out in practice. One day they may become friends. While foreign policy cannot ignore this possibility, it must contend with the probability that enmity would not cease in the near future.

Even though China and Pakistan have colluded and the collusion no doubt aggravates security problems, nevertheless they must primarily be considered apart, first, because China poses a threat in its own right and, secondly, because collusion may not have permanent foundations.

Threat from China arises from its (a) powerful resources accruing from size and population, ideology and ambitions, occupation of Tibet, and total military power; (b) well-tested guerrilla technique of warfare; (c) nuclear arms; and (d) collusion with a neighbouring state. There is no doubt that to counter this threat a strong home base backed by military power is the basic pre-requisite. This military power has to be constituted, among other things, by appropriate fighting technique as well as fighting weapons. To secure some of these weapons is the task of foreign policy, as stated above.
But, vis-a-vis China and situated as India is at present, military strength alone will not be adequate. Nor indeed would it be adequate to find a solution in terms of Colombo Proposals, which are concerned after all with the demarcation of a boundary and touch merely the fringe of the India-China problem.

To counter China India has to build a military front as well as a credible political and diplomatic front.

For this latter purpose foreign policy must have a three-tier structure. The first would be concerned with neighbouring areas: the creation of situations positively favourable to India in Nepal, Burma and Tibet. The second would be concerned with a meaningful dialogue with states on China's periphery, Thailand, Japan, Formosa, the Philippines and Outer Mongolia. The third would be concerned with the discovery and consolidation of common grounds with the two Big Powers.

Threat from Pakistan can arise from its military power. But Pakistan's own, indigenous military power is limited. It does not possess any formidable strength of the armed forces or strong defence infra-structure, and its split geographical personality is severely vulnerable. India can deal with Pakistan at the military level. In the past it has been unwilling, prevaricating and halting, in military terms, and thus got itself bogged into a most complicated situation. Therefore, the main threat from Pakistan arises from its alliances and collusions, which provide it political props and military hardware. To counter them effectively, at least in the initial stages, is the task of foreign policy. In recent years this task has increased. While pre-occupied with Communist China, it must also take into account the interests of the two Super Powers in the Indian sub-continent, Pakistan's alliances, sources of arms supply, and sallies into regions of strategic interests to India, such as Nepal, Indonesia, and Iran in the past.

Friendly Neighbouring States

These would include Nepal, Burma and Tibet.

From the Indian defence point of view, the position with Nepal following developments in the last two decades is that the Indo-Nepal Treaty of 1950 has got eroded, the country has become vulnerable to red guerrilla technique across its northern border.
and is now accessible through the Khatmandu-Kodari road to China’s military power based in Lhasa. This situation can be offset to some extent through military and economic assistance, development of some common ideological platforms, and mutual dialogue on the logistics of the area concerned.

But there are obvious limitations to this approach. Nepal is not particularly within India’s sphere of influence and prefers to maintain a posture of neutrality, which is flexible enough to develop some kind of a foreign policy of its own. Meanwhile, through actual presence and assistance programmes, many other countries, particularly the U.S.A. and the Soviet Union, have also developed interests in the country. While Nepal’s security is of paramount concern for India, to a growing degree it has also acquired an international character. It would be realistic to take note of this fact and examine it afresh in a broad sense rather than exclusively in the setting of India and China.

In the immediate context, the problem with Burma is the security of the India-Burma frontier zone, particularly in the light of the rebel activities of certain tribes. The long-range common problems are two-fold: the security of India’s north-eastern region in conjunction with Burma’s northern region, an area sensitive to guerrilla type of warfare; and the security of the Bay of Bengal which is of common concern to India and Burma.

Nothing has influenced India’s security problems and foreign policy more than the developments in Tibet in the post-Independence period. In 1950 Tibet was invaded and occupied by Red China; in 1959 the Dalai Lama was made to flee Tibet; and in 1965 Tibet was turned officially into one of the provinces of China. Part of its territory was merged into the neighbouring provinces of Szechuan and Kansu, while its population of 3 to 4 million was reduced to less than one-half by mass killings, emigration and forced expulsion. Tibet is now under Red China’s military control, practising the usual communist way of life under “unity, class struggle and socialist revolution.”

But Tibetans are not Chinese, coming as they do from a mixed Turki, Mongolian and other Central Asian stocks. In the past they have been conquered only by the Mongols, whose yoke however they threw off. The Manchus (1644-1912) held them in grip but loosely; and during the Chinese civil war and the Second
World War, they were neutral. Today they still resist Chinese occupation, and on occasions fiercely. The future of the Red Chinese control system from a remote base is still in the melting pot.

Under the India-China Treaty of 1954, India gave up all its rights in Tibet. While accepting China’s suzerainty over Tibet—unfairly for Tibetans and not strictly in accordance with history—it visualized an autonomous Tibet and not an occupied Tibet. China has occupied this territory now and turned it into a base of military power directed against the Himalayan states and India itself. This military power is composed of a large army, a number of airfields and network of roads, and huge dumps of war material. India has also developed its logistics in the Himalaya and moved up its forces to forward positions. But there is a difference. From the Himalaya as the dividing line, the heart of India is much nearer and more vulnerable than the heart of China.

A new geopolitical situation has thus developed, in which the geography of Tibet demands a fresh look.

Even at the risk of simplifying this geography which in its pre-1950 contours encompassed 400,000 square miles, it may be viewed in three broad divisions. First, the Chang Thang desert plateau, 1,000 miles long and 500 miles broad in its maximum dimensions, lying between Kun Lun mountain and the Tsang Po River valley, cold and wild, with an elevation of over 16,000 feet, called by Sven Hedin “the most massive range on the crust of the earth.” Second, the Tsang Po River valley, overlooked by the greater part of the Himalaya, in which lie Lhasa and many other important Tibetan towns. Third, east Tibet in which lie the regions of Tsaidam, Amdo and the upper courses of some of Asia’s foremost rivers.

From the point of view of Indian security, the new outlook on Tibet’s geography is that Chang Thang and not the Himalayan range is the true barrier between Central Asia and the Indian sub-continent. The Han Chinese have been infiltrating into Tibet largely through Tsaidam and Amdo and partly across the upper Yangtze Kiang; never across Chang Thang. In point of fact, Lhasa is more distant from Peking than from Delhi, and the routes into Tibet from India across the Himalaya are by no means more forbidding than those from China across the traditional China-
TIBET
Chinese Conquest and Occupation
Tibet marchland. But from the shades and shadows of the Himalaya and always looking south, Indians have never turned their eyes and mind to the possibilities in Tibet.

The neutralization of Tibet is thus the kingpin of India's defence against the north. This may not be attainable by India's military power only, and will require a Tibet-orientated foreign policy backed by force.

Areas of Tension

The world being as it is, tensions travel from place to place and erupt at particular junctures sometimes without notice. Not every one of them everywhere could be of serious concern to India, but quite often the turmoil of a region apparently far away can be of significance. Two examples may be given, from the Middle East and from Indo-China.

In regard to the Middle East, for many years foreign policy contours have embraced the Arab world, which India has sought to befriend even at the expense of Israel; the military alliance of the area, which India has sought to run down; and the inter-play of forces of the power blocs, which India has watched from sidelines.

Recent events have concretized India's security considerations related to the region. These include Pakistan seeking to deploy air power against India from extra-territorial bases (Iran), arms transactions in the area from which the enemy may benefit, and closure of the Suez Canal, which affects India's trade and supply of defence equipment.

In terms of defence, foreign policy has some specific objectives now. Of the three issues posed, at least the last two are of international interest; and of these two the passage through the canal is of great world-wide import which can no longer be viewed only in the context of regional conflicts or the sovereign rights of a particular state. India's foreign policy must acquire the range and dimensions appropriate to the task.

Indo-China, which includes the cockpit of Vietnam, is an important outpost of Asia. By jutting over a vital communication line of the West Pacific it occupies a strategic position. It can also be used as a springboard for the territories of South-East
Asia. From the security angle, the eventual problem is that it should not be overrun by or should not become the satellite of a hostile power. One notices that Great Powers are at their old game in this region, seeking to develop influence of one kind or the other. But geopolitically and in the long run, the maximum danger is from Communist China.

Strictly speaking, India has no deterrent against an eventuality such as this; it can therefore be effective only in conjunction with others. The pre-requisite would be that the states of the region should be strong and stable. This would be primarily with their own efforts, but would also need the assistance of outside powers as well as the support of some inter-regional arrangement. With its developing resources India should be able to lend a helping hand in this. Still, the question would be whether the small states of this part of Asia could get along the path of progress without some assurance in military terms about their territorial integrity and independence. Howsoever pre-occupied India may be with its internal problems, it cannot refuse to confront this question, possibly in conjunction with the United States, the Soviet Union, Japan and Australia.

The Indian Ocean

The Indian Ocean is a vast expanse of water (28,000,000 sq. miles) and India cannot be concerned with the whole of it. Its principal interests lie by and large in the Bay of Bengal, the Arabian Sea and the sea belt extending to the Equator.

India's concern is that the sea routes and air routes of the area are not interrupted, that its own security is not endangered from this direction, and that the region enjoys freedom from tension and conflicts which mar many parts of the globe today. Examining the countries situated on the seabords of east Africa, the Middle East and the land mass from Burma to Indonesia to Australia overlooking the ocean, one notices that all of them would wish the region to be as India wishes, and that none of them is in a position to seriously threaten its security. Therefore it should be reasonable to assume that from official as well as non-official levels, the concept of peace in the region can be promoted.

But the matter is not as simple as that and cannot rest here.
World powers are also interested in the region, where positions of military strength are already being built. These positions include the Polaris submarine base in Australia on the ocean’s periphery, the development of oceanic bases, the link between America’s Sixth Fleet in the Mediterranean and Seventh Fleet in the Pacific, and the growing incursions of the Soviet Navy into the southern waters. In a wider context, they are a part of the global struggle for hegemony. As in the case of Indo-China, the key to the power pattern of the region lies and will lie for many years to come in the hands of the two Super Powers. India and like-minded states should be realistic enough to recognize this fact and endeavour to establish rapport with them in keeping with their interests in the region.

The Power Blocs

It is not possible in this brief discussion to scan the entire gamut of India’s relations with the power blocs and, individually, with the countries constituting them. This is all the more difficult now when the blocs are themselves in the melting point. But in simple terms one may say that India is largely concerned with the Soviet Union and the United States. One may further say that in geopolitical terms India is concerned with them because it is both a land power and a sea power.

Considering Indian history, marred by incessant invasions from North Asia, and its long frontier, it would appear that India’s security is very largely dependent upon the balance of power in North Asia. Presently two Great Powers pervade this part of the world and one of them has already followed the old tradition of aggressing against us. India’s interests lie in fostering and maintaining the closest friendship with the other. If Russia is India’s choice, it is due not only to the Soviet support extended amply in the past but also to the geopolitical situation. India has also suffered threats and invasions by sea and consequently cannot ignore the overriding supremacy that the U.S.A. can command athwart its seaboard.

It appears that non-alignment is the only plausible course in terms of the existing power pattern with which India is concerned. Difficulties arise however because non-alignment tends to
function as a negative concept, because it contains an inbuilt element of inertia and tendency to create moral eunuchs, because of its hesitations to grapple concrete issues, and because it cannot always maintain an even keel between opposing pulls. They also arise from the fact that it brings good things from many worlds without bringing enough of them from any. This presents an area of foreign policy requiring extensive exploration both in political and military terms.
In the preceding pages we have conducted our search through many areas of Indian life and thought.

We began with its past. India's search for power is essentially in terms of the present but it cannot be uninfluenced by its history. Quite often, it is true, the present time appears to be the most important of all the times. We look upon it as upon a waterfall, thinking that it is everything. This is understandable, for after all the waterfall is a mighty, spectacular reality which matters a great deal. But it does not tell the full story, for a good deal of its character, content and promise come from the course of the river behind.

Looking back over at least forty centuries of Indian panorama, we find that during this period the Indian civilization was founded, that it was pounded upon by foreign invaders, and that in the sub-continent there developed a struggle for supremacy which is not yet ended. During these centuries too Indians raised a great pile of attainments to their credit, which gives them a depth of character, stability, strength, and an undying reserve of vitality and inspiration. Alongside it there also cropped up many ugly, debilitating things which continue to plague them.

Once upon a time, we notice, the Indian civilization was complete in every respect, with a large territory to flourish, a great
genius of the people behind it, material wealth and maturity. Why then did it not consolidate its gains and instead was pushed around by alien peoples? Amidst its numerous legacies, that question confronts us. Maybe, at some juncture some mechanism of Indian life ceased to function, thereby causing an incapacity to generate power.

Physical environment conditions powerfully India’s internal life and external relations. Take its location on the world map. Thanks to it, India has been subjected to ceaseless, often irresistible pressures from the Asian heartlands; these have now to be stemmed. The pressures have also affected an average Indian’s outlook—fatalistically orientated to the south, neglectful of the north, and thus imbalanced. The location influences climate, which in turn has a good deal to do with the efficiency of man to produce the wherewithals of power. Is this efficiency high enough for the present day conditions? That is an important question.

Upon the pattern of environment worked out by nature there has been grafted the pattern of man, in the shape of territory which is too small for a huge, growing population, has a peculiarly vulnerable shape, and some highly sensitive frontiers.

India’s environment today is live and beckoning. This is particularly noticeable in the case of the northern mountain, with its barracks and arms dumps taking their place alongside glaciers and sand-swept plateaus and also its immense wealth awaiting to yield itself up to new technology. The plateau regions are becoming India’s metal heart, coastlands are throwing up new ports and forests are being explored. These present immense possibilities, but the fruit would not come easily. Ample skill and money are needed, to which must be combined the people’s effort, enthusiasm, and willingness to make sacrifice.

Religion has been included in our sphere of search after history and environment. The significance of religion in national life is not accepted without question and yet it burrows into our thinking and actions; in India it has moulded an entire civilization and something of it clings to the Indian mind, environment, institutions, and even frontiers. One notices however that in India religion is a queer mixture of spiritual experience, social chores, superstition and fanaticism; these are often in collision and cause disintegrating effects.
It is said, on the negative side of religion, that where you are busy creating saints you may not create sanctity; where prayers, as some of them do in India, say, that birth is sorrow you may not go very far on the path of happiness; and where you keep your hands folded before gods you may not roll up your sleeves for work. In a country where at the sight of the enemy you run to the temple instead of the battlefield you do not do much for your survival. Is there something wrong with the fundamentals of Indian faith?

But religion could not have generated the abiding powerful impulses that it has in India if it had been only negative—as negative is understood in modern times. It has its sublime, constructive, even assertive aspects which must be carefully understood and made use of, and which may come handy in the processes of national regeneration. What does India’s “secularity” mean in this context? Is it only a temporary device to meet the specific contingencies which have arisen and facilitate political operations?

The political system is India’s most sensitive part of the effort to develop stability and strength. Almost every element of the Constitution, from which it springs, is vulnerable. Justice, Liberty, Equality and Fraternity, as embodied in the Preamble, are laudable concepts but difficult to imbibe, while the content and form of freedom, the hallmark of independence, is questionable. India must interpret and work out its own democracy, in an age in which “free democracy” and “socialist democracy” are in furious confrontation; in any case, democracy is a baffling compound of evil and good, weakness and strength, despair and hope, demanding rigorous pre-requisites which India will take time to generate.

But how else, unless under democracy, can the whole people, and not merely a selected handful, join hands in a mighty effort at reconstruction? Kings and gurus have had too long an innings in the Indian annals, and it is time the people began fending for themselves. Hence there may have to be more rather than less democracy in India. The fact that Indian democracy has gone through four elections, twenty years of economic reconstruction, three wars, and a period of great emotional and technical upsurge in history gives hope that this may be possible. Four provisions of
the Constitution are crucial in this respect, concerning the office of the President, Centre-State relations, language as a national medium of communications, and military affairs.

Material conditions are a paramount factor contributing to the strength of a people. There are other factors also, environment, traditions, philosophy, institutions, but satisfactions of the body are fundamental. People without adequate food, clothes and shelter and the infra-structure which caters to them are discontented, dangerous and damned.

There is a story that Indian civilization breeds the habit of doing on very little; modern India is tearing up that story.

But having fought its wars, India has also learnt that it must downgrade certain priorities of ordinary comforts. It must find the proper road between economic necessities and uneconomic burdens of power.

Human beings, raw material, skill and capital are the four main resources India has harnessed under its massive Five Year Plans. Of these human beings are the most abundant but least suitable, and to improve their quality poses a major problem. The remaining three are most suitable but least abundant and to procure them is also a major problem. Of the 270,000 million rupees funnelled into the First Three Plans India mustered about three-fourths from its home resources. The rest came through foreign assistance, which was indispensable but has proved a mixed blessing. Even then, seen from a positive angle, India's economic assault through agriculture, industry, transport and communications, and social services has been massive and multifarious; as such it raises hope. But when correlated to the expectations and satisfactions of the people, it also raises despair.

Neither idealism nor humanism nor all the bitter experience of history has been able to eliminate the use of force from the management of relations between nation and nation and people of the same nation. As things happen to be, India has to create adequate military power. The various factors governing it would have to be carefully sorted out.

Of these would be the capacity of the Indian mind to think in military terms, the legacy of emasculation left behind by prolonged subjugation, and the efficacy of the social and political systems to generate force. Geography, both territorial and extra-
territorial, as also technology bearing on weapon systems and military ideas would be other factors. The military power thus created cannot be divorced from the military aims and capabilities of Great Powers and would be conditioned by all the three forms of warfare presently known, the conventional, the guerrilla and the nuclear.

The repercussions of this on the internal political and economic systems would have to be constantly kept in view, for unless kept within bounds military power could destroy democracy and demolish the economic structure. Within these bounds the specific issues involved would be the creation of defence consciousness among the people, re-equipment of the armed forces with modern weapons, indigenous production of arms, and renovation of the defence mechanism for control, direction, command, and operations.

Any attempt to depict India searching for power is liable to be looked at askance, for power is dynamic which could also appear to be aggressive. It could be looked at askance especially by two types of people, those who are powerful and suspect that a rival is perhaps emerging and those who are powerless and fear that an enemy is perhaps looming up. One may have no apology to offer to one or the other. It is not possible to visualize at this stage of India’s evolution as to what course the people would adopt once they acquire power. Apart from their own life, thought and endeavour, two factors, over which they would have only marginal control, would influence this course, the behaviour of other peoples and technological advances.

But before India throws its weight about, it must develop certain basic conditions for its existence, which include strength, stability and the capacity to influence. These conditions are necessary for the good of a large part of humanity which happens to inhabit India, one-seventh of the human race in fact, and a large, vital part of the globe, in which India is located.

In this book the search has been conducted through the six main areas as mentioned above. I do not know whether any one of them could be considered more significant than the other. It is thought that modern changes, especially of a technological nature, have altered radically their relative importance. That may be so, but it is certain that real power is produced by the com-
bination of results achieved in each one of these areas. A hydrogen bomb could give a tremendous boost to military effort, but what use is it without the backing of an organized, purposeful life of a community? But these areas are by no means exhaustive. There is one more at least, the one in which are generated the will, enthusiasm and confidence of the people for their future; without these power cannot be created, however ample the material resources may be.

Scanning the Indian scene over these many areas, one notices contradictions. On the one hand, ideals are high, ambitions are unlimited, effort is massive, and resources are great. Under their impact life appears feverish and fast, like a clock of which the hair-spring has slipped and which is racing. But, on the other hand, many a time the clock appears dead and life appears to have come to a standstill; then the people appear to be doing very little beyond collecting piles of debris under which they would eventually bury themselves. And yet, howsoever serious, these contradictions should be expected, and are a part of the challenge to be met; there would be no need for struggle and none for our search if there are no contradictions.

When and how do people become powerful? Is there some such thing as a cycle in the history of a people, by which they rise and fall, fall and rise? What is the shape of India's cycle today? These questions are too deep for me. If pursued too much they may even lead to the usual kind of determinism which suggests that the course of the life of an individual or a people is all laid out and any attempt to reshape it would be in vain. I am not confronting them, and hope that fatalism is not an iron law of existence and that human beings are endowed with the creative ability to work things out for themselves.

Hope, indeed, is the real basis for India's search for power.
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INDEX

AGRICULTURE, AS ELEMENT of economic power, 179
Ahmad, Shah Abdali, 40, 41, 45
Aid India Consortium, 174
Akbar, 33, 34, 35, 38, 39, 112
Ala-ud-din, 8, 33, 34, 40
Albuquerque, 87
Alexander, 3, 11, 12, 85
Amir, Khusro, 112
Andaman Islands, 73-75
Arabs, invasion of, 86
Aristotle, 196
Arthashastra, 9, 13, 128
Aryabhata, 17
Aryan, arrival of, 2; and caste, 26; civilization, 79; expansion, 3; as hero, 111; migration, 78; and sub-continent, 28; and warfare, 15
Ashoka, 5, 11, 16, 59
Aurangzeb, 32, 33, 35, 85
Aurobindo Ghosh, 110, 113
Ayub Khan, 300
Babar, 4, 35, 85, 107
Bacon, Roger, 47
Bahadur Shah 11, 44
Balban, 40
Bana, 9
Banihal Pass, 56
Bhakti movement, 23
Bharata tribe, 2
Bharatiya Jana Sangh, 113, 114
Bhaskra, 17
Bhoja, 1, 7, 11
Bhrigukaccha, 17
Brahmagupta, 17
Brahman, 8, 19, 22, 23
British, attitude to religion, 50, 51; conquest, 42; military aid, 255; military legacy, 211
Buddha, 3, 5; dissent of, 21
Buddhism, and Ashoka, 4, 5; contribution of, 21; effects of, 27
Burzil Pass, 57, 58

CASTE, AND ARYANS, 26; and democracy, 103
Chandragupta, 6, 11
Chandragupta Maurya, 4, 5, 11
Charka, 18
Chenghis Khan, 40, 80, 85, 91, 100
China, as neighbouring country, 311, 312
Chinese invasion, 89
Christianity, coming of, 50
Churchill Winston, 216
Clive, 43
Coal, as element of economic power, 191
Constitution, summary of, 125-28; and language, 149; and military affairs, 153; and unity, 140
Curzon, Lord, 189
Cyrus, the Great, 3

Dalhousie, Lord, 43
Dayanand Sarasvati, 113
De Gaulle, Charles, 132
Democracy, and freedom, 131-34; impact of, 134-39; and national security, 158-63
Dharampala, 6, 11
Dharama, 9, 10
Dravidian kingdoms, 6
Dupleix, 42
Durand Line, 45, 86

Einstein, 100
Electric power, as element of power, 193
Eliot, T. S., 111
English, as official language, 150; influence on armed forces, 235, 236
European conquest, 86-87

Fa Hien, 6
Five Year Plans, 170-78
Freud, 99

Gandhi, 21, 84, 105, 114, 117, 118, 120, 133, 138, 153, 179, 223
Geography, influence of, 225
Gita, 11, 20, 23, 25, 31, 36, 103, 113
Goethe, 117
Greek invasion, 4
Gulab Singh, 59

Haji Pir Pass, 294
Harsha, 6, 7, 9, 11
Hastings, 43
Herodotus, 16
Himalaya, as barrier, 54
Hindi, as official language, 150, 152
Hindu, nationalism, 113 ff
Hinduism, challenges to, 123; dominance of, 95; features of, 26, 27; impact on society, 25; and Islam, 39, 40; its military implications, 106; rise of 21, 22, 24
Hitler, 92
Hiuen Tsang, 6, 57
Huns, 4, 12

Il Timish, 40
India, as secular state, 96-99; geographical transformation, 75; importance of location, 77; influence of climate, 81; on the advent of the British, 41; on the eve of Independence, 48; physical landscape, 53; routes of invasion, 84
India, ancient, economics and sciences, 15; politics and warfare, 8; religion, 19, 25; sources of material, 8
Indian, armed forces—Air Force 241, Army, 237, Navy, 239; Civilisation, 1, 2, 28; constitution, 124; economic planning, 167; genius, 222; nuclear programme, 259
Indian National Congress, 49, 113, 136, 140, 161
Indian Ocean, influence on India, 80, 81; strategic importance, 317, 318
Indus Valley Civilisation, 2, 13, 15, 16, 19, 22
Islam, and Hinduism, 39; influence of, 36; politics and warfare, 33 ff

Jammu and Kashmir, strategic importance, 56-60
Japanese, invasion of, 88
Jehangir, 34, 39
Jungle Code, 220

Kabir, 112
Kalidas, 6
Kanishka, 4, 6, 59
Karakoram Pass, 277, 279, 280
Kautilya, 11, 12, 83, 91
Keats, 207
INDEX

Khyber Pass, 45, 85, 86
Kilik Pass, 58
Kipling, Rudyard, 101, 270
Ktesias, 16
Kumarilas, 24
Kutch, Rann of, scene of war with Pakistan, 290

LADAKH, scene of war with China, 278, 279
Lalitditya, 11, 59
Language, influence of, 150-53
Lenin, 193
Lincoln, Abraham, 224

Mahabharata, 11, 12, 23
Mahavira, 17
Mahendrapal, 7
Mahmud Ghazni, 33, 40, 56, 59, 70, 85
Manu, 24-26, 129
Mao Tse-tung, 275, 299
Marx, 99
Megasthenes, 5, 12
Nintaka Pass, 58, 61
Mira Bai, 23
Muhammad, prophet, 36, 37
Muhammad Bahadur Shah, II, 32
Muhammad bin Qasim, 86
Muhammad Ghuri, 33, 39
Muhammad Subuktigin, 32
Muhammad Tughluq, 33
Muslim expansion, 33
Mutiny, of 1857, 44, 46, 51

Nadir Shah, 40
Nana Sahib, 44
Nanak, 112
Napoleon, 129, 130, 131
Narasimhavarmman, 7
National Cadet Corps, 257
National Defence Academy, 68
Nehru, Jawaharlal, 93, 114, 157, 161, 165, 306
Nepal, as neighbouring country, 312, 313
Newton, 117
Nietzsche, 101
Non-violence, impact of, 104-6
North-East India, strategic importance of, 63
North-Eastern Frontier Agency, scene of war with China, 279, 280
Nuclear arms, 310
Nuclear programme, 259

Oil, as element of economic power, 188

Pakistan, as neighbouring country, 312
Panini, 15
Pir Panjal Pass, 56
Planck, 18
Pliny, 17
Prithviraj, 12
Porus, 11, 108
Puranas, 23, 24, 25

Quran, 34, 36, 37, 39

Rajendra Chola I, 7
Rajendra Chola I, 7
Ramanuja, 23, 24
Ramayana, 11, 13
Rana Sanga, 108
Rani of Jhansi, 44
Ranjit Singh, 56
Religion, and constitution, 97; and democracy, 102; as power impulse, 109; as way of life, 117
Resources, for planning, 173
Roosevelt, Franklin, 100, 168
Routes of invasion, 84

Samudragupta, 11
Sankra, 24
Shah Jahan, 36, 38, 40
Shastrl, Lal Bahadur, 259
Sivaji, 108
Stalin, 100
<table>
<thead>
<tr>
<th>Term</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel, as element of economic power</td>
<td>185</td>
</tr>
<tr>
<td>Sufism</td>
<td>38, 39</td>
</tr>
<tr>
<td>Sukhracharya</td>
<td>11</td>
</tr>
<tr>
<td>Tagore, Rabindranath</td>
<td>153</td>
</tr>
<tr>
<td>Tamerlane</td>
<td>59</td>
</tr>
<tr>
<td>Tantia Topi</td>
<td>44</td>
</tr>
<tr>
<td>Territory, the question of</td>
<td>90</td>
</tr>
<tr>
<td>Tibet, and the British</td>
<td>46</td>
</tr>
<tr>
<td>strategic importance</td>
<td>313-15</td>
</tr>
<tr>
<td>Tilak</td>
<td>113</td>
</tr>
<tr>
<td>Timur</td>
<td>40</td>
</tr>
<tr>
<td>Tippu Sultan</td>
<td>70, 108</td>
</tr>
<tr>
<td>Todar Mal</td>
<td>35</td>
</tr>
<tr>
<td>Tolstoy</td>
<td>91</td>
</tr>
<tr>
<td>Transport and communications, as element of power</td>
<td>196</td>
</tr>
<tr>
<td>Tukkrama</td>
<td>23</td>
</tr>
<tr>
<td>United States, and economic aid, 175-76; and military aid, 254, 255; as member of power bloc, 318</td>
<td></td>
</tr>
<tr>
<td>Upanishad</td>
<td>19, 20, 23, 24, 36</td>
</tr>
<tr>
<td>USSR, and economic aid, 175, 176; and military aid, 255; as member of power bloc, 318</td>
<td></td>
</tr>
<tr>
<td>Vallabhacharya</td>
<td>23</td>
</tr>
<tr>
<td>Vasco da Gama</td>
<td>86, 87</td>
</tr>
<tr>
<td>Vedas</td>
<td>19</td>
</tr>
<tr>
<td>Vedic faith</td>
<td>19</td>
</tr>
<tr>
<td>Victoria, Queen</td>
<td>46</td>
</tr>
<tr>
<td>Vivekananda</td>
<td>101, 153</td>
</tr>
<tr>
<td>Wellesley</td>
<td>43</td>
</tr>
<tr>
<td>Wellington</td>
<td>17</td>
</tr>
<tr>
<td>Zoji La</td>
<td>57, 58, 279, 280</td>
</tr>
</tbody>
</table>
Culture - India
Indian - Culture