WESTERN IMPERIALIST ARMIES IN ASIA

by

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The University of Michigan

September, 1974

I

The European conquest of Asia is one of the major historical movements of our time. Pannikar calls this the age of Vasco DaGama[1], Parry writes of the rise of European hegemony[2], and McNeill sees it as part of an even broader historical process that he calls the rise of the west.[3] For all observers it was truly a conquest, a violent and bloody struggle in which Europe gained the ascendence through superior military might.

The instruments of this conquest appear at first glance to be primarily technological. Thus Pannikar sees the dominance of European **maritime** powers over land masses of Asia as a central unifying element in the rich diversity of the epoch.[4] Following Pannikar in a brilliant little book, Professor Cipolla is forced against his own Pacifist leanings and landlegs to "recognize. . .the importance of guns and sails."[5] Parry, too, gives special weight to charts, ships and guns in the expansion.[6]

Technology does not exist in a social vacuum, however. The larger pattern of European conquest **and defeat**, illustrate that other conditions may well govern whether technological superiority is decisive or impotent. In 1753 at Plassey the British general Clive may well have "defeated" an army of 50,000 Indians with a force less than a tenth that number, but in 1947 tens of thousands of highly equipped troops facing **unarmed** masses could not bring peace or stability to British rule in India. Vietnam offers an even more dramatic case of this reversal. In 1875, 212 French could take the citadel at Hanoi, but in 1954 100,000 could not hold it. And in the 1960's more than half a million American and allied troops could not maintain a presence

in Vietnam even with a military technology that previous generals would

have found awesome if not unbelievable.

Dramatic as these reversals in the power of technology may be,

it is possible to see them as only more extreme illustrations of a

fundamental rule in the conquest of Asia. The social organization in

which a technology emerges and operates is decisive in determining

how potent that technology will be. This is scarcely a novel observa-

tion, to be sure. Parry sees the institutional structure of the modern

state, interlacing war and trade in conflict with other states, as a

key organizational element in the expansion. McNeill argues the advan-

tage of the West lay in the combination of "Firm belief in their own

institutions, together with burgeoning numbers, the world's most powerful

weapons and most efficient network of transportation and communications."[7]

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the central task of this essay. It constitutes in a sense an attempt

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The organizational details of the conquest stand out in strong-

tenth that number, but in 1947 tens of thousands of highly equipped

est relief when we consider the task of establishing control over land.

troops facing unarmed masses could not bring peace or stability to

This task was begun in earnest only in the middle of the 18th century,

British rule in India. Vietnam offers an even more dramatic case of

and continued to the end of the 19th century. For the first two to

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three centuries of European expansion, however, it is true that the

but in 1954 100,000 could not hold it. And in the 1960's more than

superior maritime technology of the West was the crucial element, and

half a million American and allied troops could not maintain a presence

it will be useful to review this period briefly.

Portugese and Spanish and then Dutch and English incursions in Asia came first in the form of powerful new ships carrying heavy guns. Whether the Europeans met the weak resistance of the Southeast Asian sultans or the powerful land-based princes of India, it was the great technological superiority of the fleet that provided the inroads.

The maritime empires of Southeast Asia could offer little resistance, and their trade patterns were broken up and dominated by the West. In India the Portugese capacity to hold the fortification at Diu, a capacity based on maritime superiority alone, led the great Akbar to establish peaceful relations with them after his own conquest of Gujerat in 1572-3. And later in 1616 the plan to _use_ demonstrated British naval superiority against the Portugese and other enemies led the Moghul Emperor to grant residence and trading priviledges to the British in Surat.[8] Western maritime technological superiority was novel and decisive in establishing the initial presence.

The technological advances underlying Western superiority were by no means trivial. As Professor Cipolla argues, in shifting wholeheartedly to the gun carrying sailing ship, exchanging oarsmen for sails and warriors for guns, the Atlantic peoples broke the bottleneck of human energy and harnessed massive power sources for their activities.[9] But it is also important to note that these technological advances were made in the lesser European states, who were also making massive social innovations in political, military and economic organization. These were the states who pioneered the centralized administrative systems, standing armies and joint stock companies that were the organizational carriers of Western expansion.

From the middle of the 18th century maritime technology looses
its exclusive interest, however and it is the land wars that attracts
our attention. The maritime technology established Western dominance
over trade networks: sea lanes and ports. Land wars were required to
establish modern colonial control. The most dramatic of these wars,
of course, involved the massive conquest of India. But there were land
wars as well in Southeast Asia, and in all of these we can see the
common thread of the decisive power of organization.

Just as in the great reversals noted earlier, the ratio of
combatants offers the most dramatic index of organizational detail,
and raises the questions to which this essay is addressed. How could
a British force of three thousand decisively defeat an Indian force
of perhaps 50,000? How could the relatively small European forces,
foreign troops far from home, gain ascendance over the masses of native
troops that a typical local ruler could muster? The really remarkable
aspect of the European conquest of the Asian land mass is that it was
accomplished by small numbers of troops. And why could not much larger
bodies of European troops hold that land mass a century later against
often numerically inferior forces? Thus the ratio of combatants provides
the index that gives drama to the question of the rise and fall of the
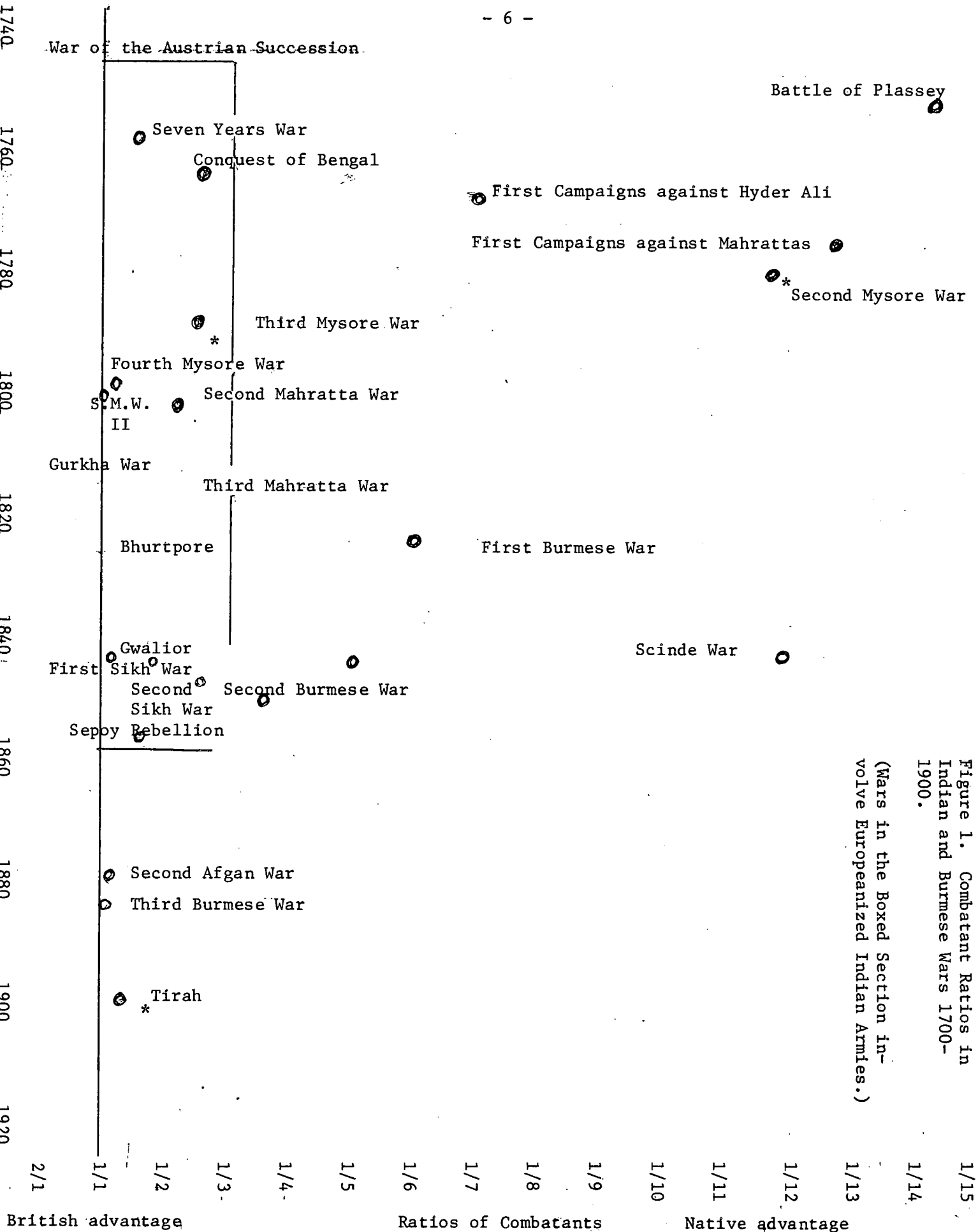Vasco DaGama epoch.

Combatant ratios are notoriously slippery quantitative measures.
The body counts and muster roles of late "imperialist" wars of the mid-
twentieth century give the modern observer cause for more than a little
scepticism. And in any epoch campaign successes reported by soldiers
far from home may be expected to show a certain exaggeration. To add
further difficulties, the campaigns of the Asian conquest are still

largely documented and available only from the eyes of the successful commanders. Nonetheless, even if we take a large measure of exaggeration as the constant, we note a distinct historical trend in the reports of combatant ratios. It is the large historical changes in the ratios, rather than the specific numbers of any campaign, that mark our use of them. Here the exaggerations and errors of the field are less troublesome.

We begin with India, where the struggle is most fully documented and the historical trends are clearest. Combatant ratios for India and Burma are shown in Figure 1, actual troops numbers are shown in Figure 2.

II

The first land wars of imperialism in India were primarily between the French and British. These two were extensively involved in colonial struggles in North America as well and the struggles had their counterpart in Europe. The death of Aurangzeb and the decline of the Moghul Empire brought a power vacuum that implied inevitable conflict between the European forces involved in India. War in Europe marked only the formal commencement and cessation of hostilities and the formal resolution of the conflict in India. The period covered the years 1746-63, and coincided with the European War of Austrian Succession (1746-48) and the Seven Years War (1756-63). The French ultimately lost the overall conflict and were confined to a small police force in Pondicherry. Here British maritime superiority was important in controlling the sea lanes by which French and British positions were supplied. What is most important in this conflict, however is its structure as reflected in numbers of troops.
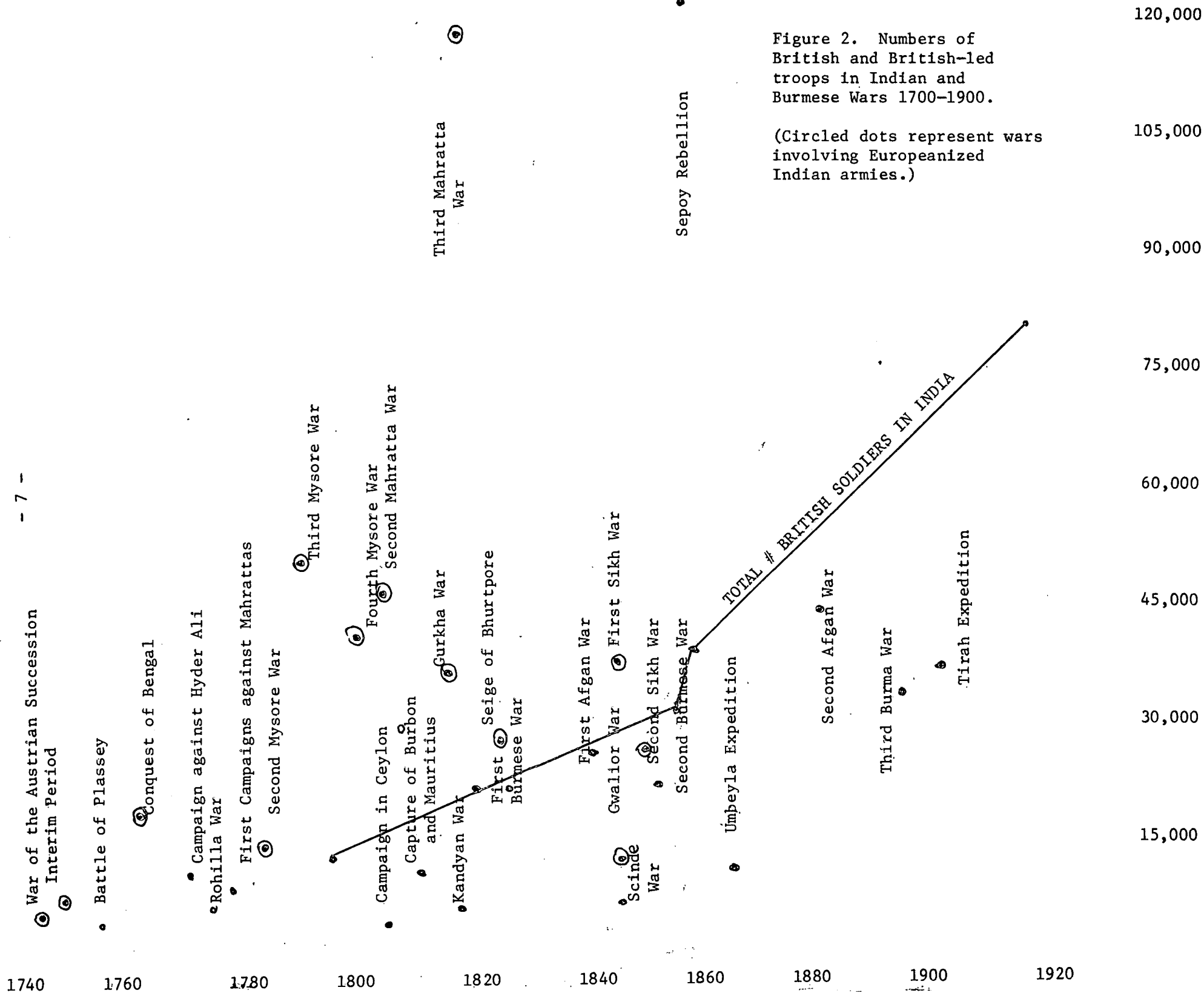
War of the Austrian Succession

Battle of Plassey

Seven Years War

Conquest of Bengal

First Campaigns against Hyder Ali

First Campaigns against Mahrattas

Second Mysore War

Third Mysore War

Fourth Mysore War

S.M.W.
II

Second Mahratta War

Gurkha War

Third Mahratta War

Bhurtpore

First Burmese War

Scinde War

Gwalior
First Sikh War
Second   Second Burmese War
Sikh War
Seppy Rebellion

Second Afgan War

Third Burmese War

Tirah

| 2/1 | 1/1 | 1/2 | 1/3 | 1/4 | 1/5 | 1/6 | 1/7 | 1/8 | 1/9 | 1/10 | 1/11 | 1/12 | 1/13 | 1/14 | 1/15 |

British advantage   Ratios of Combatants   Native advantage

1740
1760
1780
1800
1820
1840
1860
1880
1900
1920

Figure 1. Combatant Ratios in
Indian and Burmese Wars 1700-
1900.
(Wars in the Boxed Section in-
volve Europeanized Indian Armies.)

Figure 2. Numbers of British and British-led troops in Indian and Burmese Wars 1700–1900.

(Circled dots represent wars involving Europeanized Indian armies.)

120,000

105,000

90,000

75,000

60,000

45,000

30,000

15,000

Third Mahratta War

Sepoy Rebellion

TOTAL # BRITISH SOLDIERS IN INDIA

War of the Austrian Succession
Interim Period
Battle of Plassey
Conquest of Bengal
Campaign against Hyder Ali
Rohilla War
First Campaigns against Mahrattas
Second Mysore War
Third Mysore War
Fourth Mysore War
Second Mahratta War
Gurkha War
Seige of Bhurtpore
Campaign in Ceylon
Capture of Burbon and Mauritius
Kandyan War
First Burmese War
First Afgan War
First Sikh War
Gwalior War
Scinde War
Second Sikh War
Second Burmese War
Umbeyla Expedition
Second Afgan War
Third Burma War
Tirah Expedition

1740   1760   1780   1800   1820   1840   1860   1880   1900   1920

By the standards of contemporary Europe the conflict in India involved no more than a series of skirmishes. For any campaign the number of Europeans involved rarely exceeded 1,000, with the largest battles contested by 8,000. Further the ratios of combatants usually approximated unity.

One campaign from the War of Austrian Succession can serve as an example of these early conflicts. In 1746 the French made an alliance with the Nabob of the Carnatic whose territory included Pondicherry, with a French factory, and Madras with an English factory. Through French influence the Nabob forbade the English to attack any French garrisons located in his territory. Thus, the English fleet which had sailed for Pondicherry, was forced to retire to Ceylon. This left the French position unhampered and Dupleix, the French commander attacked Madras with 1,100 Europeans, 400 trained Sepoys and a fleet of eight ships. The 200 man English garrison was greatly outnumbered and Madras fell easily to the French. The Nabob sent a punitive force against the French for this untrammeled aggression, but the French beat back the Nabob's forces.[10] The French then turned to attack Fort Saint David, but by this time English reinforcements of 4,000 men had arrived and the French attack failed. The French fell back and were in turn besieged in their capital of Pondicherry. The British siege lasted three months, was very unskillfully managed, and ended when the rains forced the British to withdraw. By the next dry season, 1748, Europe was at peace. Direct hostilities in India were halted and Madras was returned to the English.

This conflict typifies the wars that continued for about two decades through the interim period of European peace and the Seven

Years War (1757-1761). Alliances, counter alliances, seiges and treachery
in the face of shifting advantages were characteristic of this conflict.
It is significant that the ratio of combatants for all these British-
French campaigns averaged about 1 to 1. Large imbalances typically
brought victory to the numerically superior force.

Two decades of conflict left India largely to the British, as
France suffered losses in Asia, North America and Europe. At this
point the character of the conflict changed dramatically. The British
began campaigns to gain control over land, and the displaced French
soldiery often sold their services to Indian princes. When the Euro-
peans fought one another, with the military organization developed in
Europe, troop numbers were small and the contenders were usually of
approximately equal strength. When the British began campaigns against
Indian armies, their troop numbers remained small at first and grew
steadily during the following century. Combatant ratios, however, were
heavily unbalanced against the British. But in these battles numerical
inferiority was not a serious disadvantage. The Battle of Plassey
was the first of this new period of conflict.

In May 1756, the Nabob of Bengal made the first move by march-
ing with his army of 50,000 horsemen, obliterating several small British
garrisons and seizing Calcutta. As an answer to this a British force
of 800 Europeans and 1,500 Sepoys was sent from Madras, which, with
reinforcements, totalled 3,500. After a brief battle that blocked the
advance to Calcutta, the British successfully re-occupied the city,
and continued in pursuit of their enemy. On the 23rd of June, the
British under Clive were drawn up with about 3,000 men at Plassey in
the face of the total 50,000 man native cavalry under Siraj-ud-daula.

The day was spent in returns of cannon fire from one position to the other. No hand to hand combat had been engaged in and no charges had been made. At about two o'clock the Nabob ". . .sent word to the small party of Frenchmen with him that he was betrayed, that the battle was lost, and that they should save themselves; immediately after this he fled on a swift camel and himself brought to Mushdabad the news of his overthrow."[11] With this the Bengalese army was dispersed easily by the British and the battle was won that afternoon. The Indian prince, Siraj-ud-daula, eventually met a violent death at the hands of his own generals.

This Indian defeat puts into bold relief several organizational defects in the Indian system. All indications point to the organizational variable since we know that in this case the Bengalese army was equipped with adequate artillery, mention is made of the "cannonade opened by the enemy."[12] An examination of the organization of the traditional Moghul army is useful here.

The traditional Moghul army was organized on the mansab system, a form of feudal military organization. A rich, or upper caste man would attach to himself as many men as he could, and would be assigned a rank commensurate with this number. The greatest chief, in whose interest the war was being fought, would pay those sub-chiefs a fixed fee for the use of these troops. After taking a large share, the sub-chief would pay his men from the remainder. These various sub-groups owed no real allegiance to the main organization or to the goals and purposes of the organization, and only a nominal allegiance to the commander-in-chief. Irvine notes, "But from the highest to the lowest rank, the officer or soldier looked to his immediate leader and followed

his fortunes stuyding his interests rather than those of the army as a whole."[13]

This feudal military organization produced a highly fragile structure. It was marked by an inordinate dependence for the continuation of battle upon the visible presence of the commander in chief. To increase the fragility, the personal quality of leadership usually implied no orderly plan of succession. Thus if the Nabob himself were killed or if he fled, the entire structure would dissolve. Thus at Plassey when the Nabob fled on a swift camel, the troops melted away. A contemporary observer commented: "Nothing was more common than for the whole army to turn its back the moment they perceived the general's seat empty. But Europeans these forty years past (1745-85) gained many a battle by pointing a four-pounder at the main elephant, Indian generals have abandoned the custom and now appear on horseback, nay have learned to discipline their troops and to have artillary well served."[14]

A bureaucratic action typical of the British stands in marked contrast to the fragile Indian structure. At the original seizure of Calcutta preceeding Plassey, the British governor, commandant and several senior members of council deserted by ship down river. Immediately one of the junior members of council assumed control.

Another great organizational flaw commented on by many 18th Century observers was the complete lack of order and discipline with which the Indian armies fought. Irvine observed: "According to our European notions, discipline was extremely lax, if not entirely absent . . .when once the army was thrown into confusion it was impossible to restore a Moghul army's discipline, while during the march they moved without order, with the irregularity of a herd of animals."[15]

In reference to the infantry (of which there was actually little in an Indian army) Irvine quotes a contemporary of Clive, "Another observer, Orme, ...says the infantry consisted of a multitude of people assembled together without regard to rank or file; some with swords and targets, who could never stand the shock of a body of horse; some bearing matchlocks, which in the best of order can produce but very uncertain fire. In short the infantry were more a rabble of half armed men than anything else."[16]

Irvine quotes another author, Fitzclarance, who describes an Indian infantry charge on the 26th of November, 1817: "Their manner of advancing was exceedingly imposing. Being perfectly undisciplined, they advanced in a crowd; the bravest being in advance and taking high bounds and turning the sound of small drums, accompanied by the perpetual vociferation of the war-cry "Din! Din! Muhammad!"[17]

This same disorganized method of attack was practiced by the cavalry as well, "...whosoever had seen a body of ten thousand horse

advancing on the full gallop all together will acknowledge ... that their appearance is tremendous, be their courage or discipline what it will...yet a few European squadrons could ride them down and disperse them. There was a want of sympathy between the parts, and this prevented one part depending upon the assistance of another. Owing to its size, an army of Moghul horse could, for the moment, meet the attack of a small compact body by a portion only of its total strength, and since as against disciplined cavalry, an equal front of an irregular body of troops can never stand the shock of an attack, the Moghuls were bound to give way. The whole being thus broken

up into parts, the parts avoided exposure to the brunt
of the action; the part actually attacked fled, but the
parts not menaced did not combine to fall on the rear
of the pursuers. On the other hand, the disciplined
troops divided, reassembled, charged and halted on a
singled part in turn. But if the drilled cavalry tried
skirmishing, it was soon found that the Moghul horse,
apparently so despicable, were most formidable in detail.
In single combat a European seldom equalled the address
of an (individual) native horseman."[18]

This general lack of organization was not restricted merely to
battle techniques. Neither the army, nor the individual groups within
it, practiced or drilled in combined movements of any sort. A contem-
porary English visitor to a Moghul army camp in 1791 observed, "The
traces of order, discipline, and science are so faint as to be scarcely
discernable, except in the outward appearance of the men, the manage-
ment of their horses, and their dexterity in the use of the spear and
sabre, which individually gives a martial air."[19]

There was one further aspect of organizational disadvantage.
Each individual soldier owned his own horse. His pay was determined by
the quality of that animal. If a man's horse were killed he was ruined
irretrievably. Since the Nabob would not make good the loss, with the
loss of his horse the soldier lost his entire allowance. Such a system
discouraged a soldier from taking risks and encouraged cavalry to avoid
the heart of the battle.

The third division of the army, the artillery, was also plagued
by the same organizational impediments. Robert Orme, an Englishman

living in India in 1746, has left us his observations of the artillery of the Nabob of the Carnatic. "Having never experienced the effect of field pieces, they had no conception that it was possible to fire with execution the same piece of cannon five or six times in a minute; for in the awkward management of their own clumsy artillery, they think they do well if they fire once in a quarter of an hour." An account of the Mahrattas in 1791 shows this same inability to use the weapons to their full advantage. "A gun is loaded, and the whole people in the battery sit down, talk and smoke for an hour, when it is fired, and if it knocks up a great dust, it is thought sufficient: it is reloaded and the parties resume their smoking and conversation. During two hours in the middle of the day, generally from one to three a gun is seldom fired on either side, that time being as it would appear, by mutual consent set aside for meals."[20] For Turkish and Asian armies the gun technology was employed tactically as a siege weapon. It was the Europeans who pioneered in lighter guns for field operations.

Pannikar considers Plassey not a battle but a transaction.[21] It was a transaction characteristic of the decline of the Moghuls and the rise of the English. Non-muslim entrepreneurial groups rose in the transformation of the Indian economy from an agrarian to a commercial base in the course of the 17th and 18th centuries. The entrepreneurial groups worked to undermine Moghul power in India, just as the burghers in Europe allied with Kings to undermine the power of a landed aristocracy. But whereas the burghers had often gone to battle against the landed knights, the entrepreneurial class in India had

the Company as a major fighting ally. India was sold out to the East
India company to gain the ascendence of a capitalist class.

It is true that Plassey was not a pitched battle stubbornly
fought. It did not provide the rhetoric by which heroic battles are
described. But it was not anomalous for this. On the contrary, how-
ever unusual was the structure of the Battle of Plassey, with its
small contingent of British and British trained sepoys facing and sub-
duing ten times their number of fierce Indian troops, it was the structure
that marked battles in the conquest of India for the next half century.
The first two Mysore wars (1767-69 and 1780-84) and the first of the
Mahratta Wars (1774-82) all show combatant ratios in which the British
face Indian forces about 10 times their own strength.

In all of these cases it was not the lack of modern technology
nor the treachery of the rising non-Muslim entrepreneurial class that
proved decisive. It was the European military organization that won
over traditional Indian armies. What proved decisive for the British
was the capacity of the infantry to hold their ranks and return the
fire, of the calvary to charge, halt, reassemble and turn at a single
point, of the artillery to fire field pieces in concert and with great
accuracy five or six times a minute. Behind this capacity lay the
impersonal bureaucratic organization that had been evolving in European
military arrangements over the past two to three centuries. So long
as the bureaucratized, rationally organized British military faced the
traditional military of the Indian princes, combatant ratios could
remain highly unbalanced without adverse effect upon the foreigners.
In this period it was not simply "getting their fustest with th' mostest"
that counted; it was organization that counted.

Like the gun technology, which had already been acquired by
the Indian princes, the organizational principles could also be acquired.
In some respects this was relatively easy, since the French failure threw
onto the subcontinent a ready supply of personnel experienced in those
principles. Indian princes often took the French into their service
for the explicit purpose of reorganizing and modernizing their armies.
The course of the Mysore wars illustrates how this change in organiza-
tion affected the course of the conflict and is reflected in combatant
ratios.

The first Mysore war involved about 10,000 British against
about 70,000 troops of Hyder Ali, lasted almost two years and ended in
something of a stalemate. A decade later the Second Mysore war involved
11-15,000 British against even heavier odds, perhaps 90,000 Indian
troops. Of these, however, 1,500 were French trained and 400 were French.
The war dragged on for four years and also ended indecisively. By the
third Mysore war, in 1790, the Indian army was more fully Europeanized
and required on the British side some 50,000 troops, the largest force
they had yet fielded in India. The fourth and final Mysore war
required roughly similar levels of British military. The respective
combatant ratios for the four wars was 1:7, 1:12, 1:2.5, 1:1.2.

Contemporary accounts show some of the detail of the new
Europeanized organization.[22] Hyder Ali impressed foreign observers
in 1781 by marching his forces one hundred miles in two days and a
half. His successor Tipu Sultan marched his entire army 63 miles
in two days in 1790. These were considered feats as wounderful as
those accomplished by British forces. All of these marches were
noted for being atypical of Indian military behavior.

The Mahratta wars illustrate another aspect of the organizational diffusion that was changing combatant ratios at this time. The new military organization demanded in India as it had in Europe, a larger transformation in the political structure. The limits of political transformation placed limits upon the successful adoption of a new military organization.

The first Mahratta war belongs clearly in a class with Plassey and the first Mysore war. After this the Mahratta rulers began to use the French extensively. One of the first in their service, de Boigne, raised a force of 1,700 that proved so successful against native enemies that he was asked in 1790 to raise the force to "thirteen battalions of infantry with calvary and artillary, and later to three brigades of 18,000 regular infantry, 6,000 irregulars, 2,000 irregular horse, 600 Afghan cavalry and 2,000 guns."[23]

The mansab system was replaced with a highly centralized military organization in which the prince raised the entire force at his own expense. This avoided the fatal fractionated character of the traditional armies and gave great advantage to the Mahratta ruler. But it also made heavy, and as it turned out impossible demands on the entire political system. The cost of raising a centralized army dictated the sequestering of feudal estates, jagirs, strongly reminiscent in both motivation and process of the rise of central states and bureaucracies in Western Europe. Such centralization weakened the political system internally by alienating powerful local leaders.[24] In addition, the external thrusts from Afghanistan placed further intolerable burdens on the system and the British eventually produced its forceful dissolution.

Even with all these difficulties, however, the Mahratta adoption of the European military organization in the field produced a formidable foe. The second and third Mahratta wars saw combatant ratios approaching unity and forced the British to field first 50,000 then over 100,000 troops. These wars also involved some of the most desperate fighting yet encountered in India.[25] A description of the Second Mahratta war can serve to illustrate both the complicated and the desperate nature of this type of conflict.

War was declared in August 1803, and the two British armies, one from the north and the other from the south were sent out against the enemy. Subsidiary operations were to be carried out by smaller armies on the flanks of these main offensives. The Northern operation had a total of 21,000 men, the southern army consisted of 20,000 men for the main army and a subsidiary force of 4,000. The total British force then was something around 50,000 men. This was the largest British force that had been fielded up to that time. They faced several Indian armies totalling some 100,000 men.[26]

The course of the war is very complicated: a total of 21 separate battles was fought over a period from August 1803 to December 1805. The entire force on either side was never completely assembled in one place, because the war occurred in more than one theatre of operation. The first major battle was fought at Asseye. Part of the British army from the south, consisting of about 6,000 men with 14 guns, faced a Mahratta host of 18,000 men trained by the French, and 15,000 to 20,000 irregular cavalry, with 100 guns. The British put the Mahrattas to flight but only with a severe loss of over 2,000 men. On the 29th of November another action was fought

with a partial British victory. The early part of the battle was
dominated by the Indian's effective use of their heavy batteries,
although the British ultimately managed to capture 38 guns. On the
15th of December the fortress of Gwalighur was taken. During these
operations several French officers and non-commissioned officers
surrendered. Some French had been found among the dead after several
engagements. One outstanding characteristic of these battles of
Assaye, Argaum, Aseergurh and Gwalighur was that they were all opera-
tions of unusual severity. One author described the battle of Assaye
to be as "desperate as any in our history...the casualities were as
heavy as any other on the record."[27]

Meanwhile, the northern army first stormed the fortress of
Aligarh, and then with 4,500 men attacked 19,000 Mahrattas, who were
led by a Frenchman, M. Perron. The British defeated the Mahrattas
with great loss and captured 281 guns. At this point the French
general and some of his officers surrendered themselves. The total
number of Indian forces in this Northern campaign was 43,000 men and
464 guns. The total British was 21,000 men.

After Aligarh the British marched to Delhi where they met the
main portion of the army of Sindhia, about 20,000 men. The British
again forced the enemy from the field, capturing 63 guns, but again
only with severe losses in the face of Mahratta artillery fire. The
British then advanced to Agra, which was taken with the capture of
a foundry, run by a Scotchman, that supplied the Mahrattas numerous
guns.

At Laswari one British battalion and four Sepoy battalions
with one British regiment of horse, met an army of 14,000 Mahrattas,

consisting of 17 trained infantry battalions, 4,000 or 5,000 horses

and 72 guns. At the close of the combat, all that remained of the

17 battalions was 2,000 prisoners with every one of the 71 guns captured.

This battle at Laswarrie Sheppard describes as "...the most hotly con-

tested and desperate battle hitherto recorded in the history of our

army in India."[28]

The war was extended when one Mahratta chief declared against

the British independently. The total British in this action was 45,000

against a total Indian of 50,000. British victories were gained and

many guns captured, but only with severe losses.

A third and final war was precipitated in 1817, with a great

increase in troop strength. A total of 180,000 Mahrattas and 30,000

Pindaris joined in combat with 113,000 to 120,000 British with 300

guns. This was the largest British army yet to be seen in India up

to this time. These total numbers were the British armies themselves

(including Sepoys) and not British armies plus allies. The unusually

high number of men involved is not only a result of French military

skills learned by the Mahrattas, but also of the immense territory

involved and the police action this territory required.

The Sikh wars provide another example of the power of European

military organization, especially when it is based upon a more central-

ized political system. Of the three European trained armies that the

British fought in India the Sikhs were perhaps the most formidable.[29]

On a scale of adaptability to European organization, the Sikhs are on

the far end. In addition, the Sikh army enjoyed an advantage that the

Mahrattas and the state of Mysore did not have, time to train their

forces.

The army of Ranjit Singh, the Punjab's most formidable general, began to train soldiers with European techniques as early as 1803, a full 42 years before the first confrontation with the English. The first influence of the European organization was gained indirectly. Deserters from the East India Company, mainly Hindustani Muslims and a few Eurasians, were hired as drill sergeants. The exact number of these deserters is not known, but we know that there were enough to form a platoon. Ranjit Singh also arranged to have Punjabis enter into the British armies and later report to him so that he might gain further knowledge of the British technique of organizing their army. A short campaign with this newly organized force against a rebellious chieftan showed the decided advantage of such training. As a consequence, in 1804, the British method of training and warfare was adopted on a larger scale.[30]

The first European was hired in 1809, but it was not until 1822 that any Europeans of consequence joined the Sikh force. Two French officers, who had served under Napoleon, became generals in command of large portions of Ranjit's army. By 1822 there was a total of over fifty Europeans of all nationalities in the Service of the Sikh army. It also possessed a gun foundry run by a Frenchman, which by some accounts produced better guns than the ones in British possession.

Ranjit Signh's interest in British organization even went to the extent that, when Lord Lake was in an area near the Punjab, he disguised himself and entered the British camp to see how the British trained themselves. He had an interview with General Lake himself. Ranjit's success in militarily uniting the Punjab was for the most part due to his ability to reorganize his army in this British fashion.

One author describes an encounter with a native enemy as follows.
"This battle lasted only one day and the Ghazis gained the martyrdom
they sought; they were a rabble armed with swords or spears and had
to contend with a disciplined army equipped with muskets and field
batteries."[31] The Sikhs are a particularly appropriate example of
the effectiveness of European training. Unlike the traditional Moghul
army, the Sikhs would regroup themselves after a charge. They were
the "disciplined troops who divided, reassembled, charged and halted
on a single part in turn."[32] This is what the British found to be so
devastating.

In technology, we find that the Sikhs were comparable to the
Mahrattas. The evidence shows that for the most part the Sikh artillery
equalled, if not excelled, the British. The Sikhs provide no exception
to the rule that Indian armies had weapons equivalent, or near equivalent
to the British.[33]

It is also fairly clear that the European presence influenced the
basic structure of the army. The Sikh army, like that of the Mahratta
prince Sindhia mentioned earlier, was a highly cohesive and corporate
body. With the death of Ranjit Singh, the Punjab was subjected to
several years of internal disorder. But throughout the internal con-
flicts in the palace, the one body to emerge as a central authority
was the army. The Lahore state was transformed into a military state
by a process similar to the government of Imperial Rome. Instead of
fractionating as a traditional army would, the Sikh army maintained
itself as an organization.

Here it is apparent that the early time at which the Europeaniza-
tion of the Sikh army began, the influence of many European officers of

high quality, and a previously highly centralized political system
produced in the Sikh force a most formidable opponent of the British.
A brief account of the course of the two Sikh wars shows how formidable
a foe they were.

The army of the Sikhs in the First Sikh War (1895-1896) was
well equipped, with a total of 50,000 men and 100 guns, against a
total British force of about 41,000 men. The ratio of total numbers
involved is almost one to one.

Mudke (or Moodkee)	British 11,000 to 12,000	Sikhs a detachment "of little more than its own (British) strength"
Ferozashah	British 16,000	Sikhs 25,000
	63 guns	70 guns
Sabraon	British 15,000	Sikhs 20,000

Each of these battles was hard fought and both sides suffered severe
losses. But in all battles the British drove their opponents from the
field.

The course of the Second Sikh War in 1848 was much the same
except that the British lack of heavy artillery was corrected. This
tipped the balance and "the power of the Sikhs was broken; and the
Punjab was annexed to the British empire after the hardest fighting
ever known to the British in India."[34]

If indeed the numbers of men involved in a conflict and the
combatant ratio are indicative of the severity of the conflict and thus
the effectiveness of the native military organization, then the war
that involved the greatest numbers of men and the smallest combatant

ratio would indicate the most formidable of the British enemies. This enemy would be the army that was most effectively organized and trained on European lines. This is certainly true to a degree of the Sikhs, but it is also true of another group. It should come as no surprise that the largest British army to have ever been assembled in India, 120,000 men, 38,000 of which were Europeans, fought against their own British Sepoys in the Sepoy Rebellion of 1857. The difficulties of this war, as to be expected, were immense. There was a total of nine major conflicts and innumerable minor battles. We can forego a description of this well-known conflict except to mention that at the war's major battle, the siege of Delhi, the British losses were 40% of their total force. This should give an indication of the severity of the war.

III

The conquest of Southeast Asia displays many of the patterns witnessed in South Asia. The early inroads, confined to ports, were achieved by superior European maritime technology. Land conquest shifted the demands to those of superior organization. The course of land conquest began with relatively easy European victories achieved by small forces in the face of much larger native armies. As the course of land conquest proceeded, larger European forces were required and the combatant ratios shifted toward unity, though for reasons quite different from those in India. Internal political difficulties in the native states often gave advantage and stimulus to European conquest. Everywhere the situation and the terrain imposed their own specific demands, producing a pattern broadly similar to that of South Asia but also filled with rich and differentiating detail.

Three Burmese wars signalled the large scale British land conquest of Southeast Asia. The first war began with border disputes in 1823 and a Burmese attack on Chittagong, part of British Bengal. A British seaborne expedition of 10,000 troops occupied a near deserted Rangoon in May 1824.[35] A series of small sallies showed the great military superiority of the British. By October, however, British ranks were greatly reduced by disease, and a force of only 1,300 could be mustered to defend against the 30,000 Burmese besieging the city. By December the Burmese numbered 60,000. Six days of fighting were nonetheless sufficient to drive the Burmese from the field.

Two overland expeditions were launched on the capital at Ava. Both ended in disaster as jungle and disease made impossible the large land-mass marching and fighting to which the British were accustomed in India. Advances were made up river by a force of 3,900 and Prome was taken in April 1825. A cholera epidemic and a temporary truce altered the combatant ratio somewhat and later that year 40,000 Burmese troops attacked the small British force at Prome. A British counterattack drove the Burmese from the field. Another British advance toward Ava brought the Burmese to surrender, marked by the treaty of Yandabo in early 1826.

The course of the Second Burmese War (1852-1853) was much the same, although in this war the ease with which the British defeated the Burmese was even more remarkable. Burmese opposition in Rangoon numbered some 20,000 but were easily swept from their positions by 5,700 British. One thousand British were then transported up river where another victory was easily effected in one day against a Burmese force of about 7,000. Pegu and Prome were occupied with no resistance.

Later the British were reinforced by 14,000 men for the main push up
the river. Five hundred British troops left to hold Pegu were attacked
and held out for three weeks against 11,000 Burmese before reinforce-
ments came to drive off the besiegers. After many small guerilla type
activities, the war for the most part was ended by April, 1853. In
general the entire campaign was won with very little fighting and against
enormous odds.

The first part of the Third Burma War (1885) was much like the
first wars. War was declared in November 1885. 12,000 men were dis-
patched and two months later the operations were complete with the fall
of the capital and the surrender of the king. The war was not over,
however. Many parts of the Burmese army refused to surrender and con-
tinued guerilla activities. Now, against relatively small numbers of
Burmese the British were forced to field between 30,000 and 40,000
troops.[36] Even here, however, organizational superiority ultimately
proved decisive. The capacity of the British to organize operations
in a highly decentralized and flexible manner allowed them to prosecute
the guerilla war successfully. The operation of pacification was
carried out by small units of 100 to 1,000 troops.

Again technology alone does not appear as a critical variable.
The Burmese suffered no disadvantage from lack of military hardware.
They were "...well armed especially with artillery, skilled in the
rapid erection of stockades and rifle-pits for shelter against the
hostile fire and to impede [the enemy's] progress, practiced in the
handling of their war-canoes and fire-boats, and supremely confident
in their own prowess..."[37] Other sources are more specific about
Burmese military hardware. A colonel who fought in the Second Burmese

War wrote that the central citadel of Rangoon was defended by three
18 pounder cannons and the rest from 6 to 12 pounders. In all he
considered "...there might be forty pieces of ordinance at Rangoon."
Laurie in addition to this reported, "Some excellent guns were found
of iron and brass; two of the latter kind were deemed handsome enough
afterwards to be sent to Calcutta..." General Godwin is said to have
captured a total of 98 guns and 70 jungals. The same can be said for
the smaller arms. Laurie says that during the advance of a party of
British in one battle, "...the musketry was so steady and effective
from the stockades and adjoining buildings, that a great many of our
party were killed and wounded..." He also maintains that, "Their
infantry equipments were 'tolerably complete'".[38]

Finally, we see the same shift in combatant ratios observed
in the Mysore war and Mahratta wars in India. But in Burma it was not
the adoption of European organizational patterns that produced the
change. It was rather a combination of the difficulties of the terrain
and eventually the high costs of producing order by force alone.

As the British in India, the Dutch in Java began with a small
coastal factory oriented toward (armed) trade and protected by a
powerful fleet.[39] In 1619 when the Dutch founded Batavia, Sultan
Agung of Matram (1613-45) was unifying Java. Part of the unification
involved the destruction of the independent north coast trading states
(pasisir). In this the Dutch only too happily provided naval assistance,
with the aim of monopolizing trade themselves.

A superior maritime technology thus provided the first inroad.
The Dutch factory at Batavia constituted only a foothold tolerated by
the powerful land-based Sultan in return for tribute and naval assistance.

An attempt to dislodge the Dutch in 1628 provided the Sultan with much the same lesson Akbar had learned about the Portugese at Diu half a century earlier. A Matram force of perhaps 10,000 besieged Batavia, defended by less than 3,000. But the Matram besiegers had to be supplied by sea and the Dutch fleet destroyed two hundred vessels of rice destined for the Sultan's troops. The starving besiegers were forced to withdraw after five weeks.

The Dutch fleet could secure the port, but could not assist in land control, however. Thus the power of Matram and the more strictly commercial interests of the Dutch kept the latter confined to Batavia for about half a century. The decline of Matram power toward the end of the 17th century forced the Dutch to acquire greater control over land, and by the middle of the 18th century they were in effect political rulers of Java. Here Dutch organizational superiority proved decisive. From 1619 to 1823 some 22 conflicts are recorded, with the combatant ratios we have seen elsewhere where Europeans face native armies. Dutch forces varied from 1,000 to 7,500; Javanese from 3,000 to 11,000, though evidence of numbers is much less secure than for India. Expeditions were usually short and victories relatively easy. Normally more troops were lost to disease than in battle.

The Java War of 1825 illustrates a new turn in the European organizational superiority. The war was a popular uprising led by a dissident prince frustrated in his ambitions for power. As a popular uprising, it showed more the characteristics of a modern guerilla war than of the massed battles of India. At first the Dutch met the contenders in typical military fashion. In its early stages the war consisted of a series of wearisome and indecisive marches. When the

Dutch forces approached, hostile mobs dispersed before a hand to hand
engagement could take place and then reassembled again at another point
to harrass the foreign rulers.

To meet this new situation, the Dutch reorganized their opera-
tions into the Bentengstelsel system. This was essentially a decentral-
ization of operations, creating ten autonomous flying columns, each
containing its own infantry, artillery, cavalry, engineers and ambulance.
Bentengs, or fortified outposts, were used to consolidate territory
secured by concentric operations of the columns. Column commanders had
a great deal of autonomy and could exercise initiative independently,
though each was also to maintain contact and to collaborate with other
columns. All columns were to be operating continuously between the
Bentengs to provide an omnipresence to deter guerilla efforts. Pacifi-
cation was achieved with this decentralized organization, though the
costs were high.

The next major conflict for the Dutch was the Atche War, from
1873-1900. The first expedition brought 3,600 Dutch troops to Sumatra;
the second required twice this number to capture the Kraton, the capital
and princely residence. Although the Dutch expected this to end the
war, it merely shifted it to its next, guerilla, phase. This phase was
made more difficult for the Dutch because the Atchenes were politically
organized in a federation and the ruler had no real power to command
local chiefs to surrender, even if he had wished to. Thus the Dutch
had to use their highly decentralized military operation against a
number of individual power centers. The war was long and costly. The
largest number of Dutch forces engaged at any time was 11,000, but the
total number required over the quarter century of war was many times

that. The country was not fully pacified until 1904, though large scale operations ceased by 1900.

The French wars in Southeast Asia began later and moved more quickly through the established pattern.[40] In 1860 the ports of Saigon and Tourane (Danang) were seized. French naval superiority could not effect an easy victory, however, against the determined resistance of the Vietnamese. Nonetheless the naval supremacy did prove decisive and France began, more by diplomacy and threat than by actual combat to acquire land control through southern Vietnam, Cambodia and Laos. The threats were highly effective largely because the new steam-powered naval technology was concurrently destroying traditional native rule throughout Southeast Asia.

In the next decade the French turned their attention to the Red River delta and used their naval supremacy, with an unbelievably small force, to take the citadel at Hanoi in 1875. A total of 212 troops, of which 188 were French, proved sufficient. The diplomacy of offering protection over the thin veil of a naval threat by which Cambodia was taken was not fully successful in Tonkin, however, and the French had to use a strong force to gain land control. Against the more powerfully organized Vietnamese, the French had to field a force of 17,000 to defeat an estimated 25,000 in the Tonkin War in 1882. Here both modern military technology and European military organization brought victory to the French.

We have seen how a combination of technological and organizational superiority carried the European conquest of Southern Asia. The first inroads came through the overwhelming superiority of the maritime technology. But this technological superiority served at

first only to provide control over a network of sea lanes and ports.
Control over land required organizational as well as technological
superiority. Asian rulers could, and did, obtain the gun technology
developed by the West, though they were always at the distinct histor-
ical disadvantage of latecomers who lack the larger organizational
base to match the innovators. On the battlefield it was the organi-
zational innovation of a bureaucratically arranged army that proved
decisive. The capacity to move large numbers of men and supplies
quickly over long distances, to concentrate the power of numbers on
small targets and to redirect that concentration to other targets,
to coordinate diverse individuals and specialized units to gain the
concerted movement of masses of energy, these were the fruits of
European organizational superiority in the field. Further, the rational
orientation of the military enabled specific organizational patterns to
be altered to fit new conditions. European supremacy depended upon the
ability to <u>de</u>concentrate, to <u>de</u>centralize, as well as to centralize,
as the British in upper Burma and the Dutch in Java show so well.[41]

Where Asian rulers failed to develop this rational organiza-
tional pattern they could be defeated by inferior numbers, despite
acquisition of the gun technology. Where they managed to copy the
western organizational patterns they forced the conquerors to meet
them in the field with equal numbers. Thus the microcosm of the
battlefield provides dramatic evidence of the importance of the
modern organizational patterns in the conquest of Asia.

One additional aspect of this microcosmic change deserves
mention. Modern military operations are distinguished from more
traditional operations by the increasing impersonalization of combat.

Bureaucratic arrangements essentially depersonalize operations, substituting _rules_ administered by technically qualified officials for the _personal_ decisions of an ascriptively qualified elite. Thus the military supremacy displayed by European troops against superior numbers of brave and individually skillful native horsemen was the supremacy of the bureaucrat-technician over the hero. Heroic armies have seldom been a match for bureaucratic armies. One might even see the history of warfare as a continuous replacement of heroes with bureaucrat-technicians. Each replacement is marked by scorn, resistance and the double injury of defeat at the hands of "inferior" forces. The heroic French knight knew only scorn for the armed and drilled burghers of Lyon who stained knightly honor with their victory. Abyssinian heroic warriors under Teodoros scorned the Ottoman armies in Egypt, whose men marched about like ants, but Teodoros nonetheless attempted to imitate this ant-like force, and Menilik's success in the imitation brought him victory against the Italians in 1895. Similarly the World War I ace fighter pilot, who could shake his fist visibly at his opponent might decry the high-flying, computer-operated bombers that permit crews to "do their job" of destruction against a foe they could not even see. Yet no amount of heroism seems capable, in the past or the present, of stemming the tide of bureaucratization of warfare.

This microcosmic arena has its parallel in the macrocosmic arena. The maritime and gun technology and the organization of the army grew out of and depended upon innovations in the larger pattern of social organization. In the history of western Europe

the rise of the modern state, with its centralized administrative apparatus, is inextricably linked with the rise of modern bureaucratically organized armies and navies. Just as heroes have been replaced on the battlefield by bureaucrat-technicians, the modern state has been replaced personal rulers with trained bureaucrats and has gained immense power thereby.

The modern state has proved to be a formidable mechanism for mobilizing resources. Through coercion, compensation, and the ideological fervor of national identity the state has been able to draw together for concerted action a staggering number of disparate individuals and groups. It was the power of this mobilizing force of the state that permitted Europeans to overwhelm the more traditional patrimonial authority systems of Asia. Thus in the macrocosm of the emergence of the nation state we see parallel evidence of the importance of modern organizational forces in the conquest of Asia.

Just as Asian rulers could imitate the gun technology of the west, and with greater difficulty adopt some of the organizational patterns of the modern military on the battlefield, Asian peoples have also acquired the modern state-like organizational patterns. Asian rulers with guns were more formidable than those with spears and swords; Asian rulers with Europeanized armies were more formidable than those with traditional heroic armies; and more recently Asian peoples mobilized through nation-state arrangements have been more formidable than those mobilized by traditional patrimonial arrangements. It is this parallel of microcosmic and macrocosmic development that is reflected in the dramatic reversals of combatant ratios observed at the outset of this essay.

The first of the major nationalist wars in Asia occurred in the Philippines at the close of the 19th century.[42] Spanish colonialism had produced both the administrative and ideological underpinnings of a major nationalist movement. The Filipinos were successful in their armed rebellion against Spain, partly, to be sure, because the United States destroyed Spanish naval power in Manila Bay. But the next two years of warfare demonstrated that the Filipinos had also acquired a pattern of social organization that gave them great capacities for resource mobilization. The cabinet of Aquinaldo was that of a modern government, mobilizing an allegiance that no traditional sultan or prince could have mustered. It was capable of fielding a force of some 40,000, supported by powerful national sentiments. American forces, with their overwhelming technological superiority had to maintain twice that number over two bitter years of fighting to gain control of the Philippines.

It would be half a century after the Philippines national war before the full epidemic of national liberation took hold decisively in Asia. Again, external forces played a crucial role. Just as western imperialism and colonialism had produced the administrative and ideological underpinnings of Asian nationalism, World War II produced the catalyst that galvanized these movements into armed independence struggles. In World War II the Japanese produced something of their own reversal of the combatant ratios by which the West conquered Asia. With superior organization the Japanese took Southeast Asia, sometimes, as at Singapore, in the face of numerically superior forces.

The defeat of the Japanese brought to Asia a greater concentration of Western military power than had ever been experienced. In India, Burma, the Philippines and Malaysia this power was not directed at regaining land control and independence was gained in part with the assistance and acquiescence of the imperial powers. In Indonesia and Indochina, however, Western military power was directed at reestablishing land control. And in both cases it was decisively defeated.[43] Between 1945 and 1950 120,000 Dutch troops could not maintain a presence in Indonesia. One hundred thousand French troops were driven from North Vietnam by 1954, and half a million American troops were insufficient to maintain land control in South Vietnam. In all of these cases the West maintained a technological supremacy, sometimes of awful proportions. But the West had lost its organizational superiority and with this loss the age of Vasco Da Gama was brought to a close.

NOTES

1. Pannikar, K.M., _Asian and Western Dominance_, London: George

   Allen & Unwin, New Ed., 1959.

2. Parry, J.H., _The Establishment of the European Hegemony: 1415-_
   _1715_, New York: Harper Torchbooks, Third Ed., 1966.

3. McNeill, Wm. H., _The Rise of the West_, Chicago, University of

   Chicago Press, 1963.

4. Pannikar, op. cit., p. 13.

5. Cipolla, Carlo M., _Guns and Sails in the Early Phase of_
   European Expansion 1400-1700, London: Collins, 1965, p. 1 of

   preface.

6. Parry, op. cit., Chapter 1.

7. McNeill, op. cit., p. 730. See also pp. 655-6 for a similar

   formulation. On p. 569, however, McNeill lists European

   pugnacity, naval technology, and a population innured to

   disease as the major forces in the 16th century.

8. See Parry, op. cit., Chapter 6 for a good summary of these

   relations.

9. Cipolla, op. cit., p. 81.

10. One event in this conflict provides a preview of future events.

    This was the easy manner in which the French dealt with the

    army of the Nabob. In several actions "the cavalry of the

    Nabob were swept aside in the face of the French advance".

    Against the disorganized native cavalry charge the French

    "troops kept their ranks and reserved their fire." (Cambridge,

    p. 122). All indications point to the fact that the Nabob's

    troops were as well armed as the French. Thus the traditional

10. military proved a poor match for European discipline and deter-
    mination. This was one of the first times that a European
    organized army faced an Indian army and the ease of the French
    victory came. as something of a surprise.

11. Dodwell, H.H., ed., <u>The Cambridge History of India</u>, Vol. V and
    VI, Cambridge: Cambridge University Press, 1929.

12. Ibid.

13. Irvine, Wm., <u>The Army of the Indian Moghuls: its Organization</u>
    <u>and Administration</u>, London: Luzac & Co. 1903, pp. 57-8.

14. Ibid., p. 235.

15. Ibid., p. 182.

16. Ibid., pp. 161-2.

17. Ibid., p. 187.

18. Wilks, Lt. Col. Mark, <u>Historical Sketches of the South of India</u>,
    Mysore: Gov't. Branch Press, Vol III, p. 392.

19. Irvine, op. cit., p. 188.

20. Ibid., p. 118.

21. Pannikar, op. cit., p. 78.

22. Irvine, op. cit. p. 218.

23. Sen, Siba P., <u>The French in India 1763-1816</u>, Calcutta:
    Firma K. L. Mukopadhyay, 1958.

24. Dodwell, op. cit., p. 365.

25. McMunn, Maj. G.F., <u>The Armies of India</u>, London: Adam &
    Charles Black, 1911, p. 49. Also Sheppard, Maj. Eric W.,
    <u>A Short History of the British Army</u>, London: Canstable &
    Co., Ltd., 1926, p. 176.

26. McMunn, op. cit., p. 44.

27. Ibid., p. 49.

28. Sheppard, op. cit., p. 176.

29. The one war not mentioned in the narrative is the Gurkha War.
    It constitutes a sort of an anomoly. It is doubtful that the
    Gurkhas had any Europeans in their employment. Nepal is a
    relatively isolated country, being in the lower ranges of the
    Himalayas. However, two authors who do not list one another
    as references claim that the Gurkhas successfully used the
    European method of training and organization. (Furber, p. 109,
    Fortesque, p. 109.) Unfortunately little more is known. The
    Gurkha War 1813-1816 is most noteworthy in that it is the only
    war fought in the whole time period covered in this study that
    the British had to outnumber the enemy in order to win. In
    this case mere superiority in numbers was not even sufficient,
    the British required an overwhelming advantage to win. The
    total number of Nepalis was 12,000 men whereas the British
    force that went on the expedition numbered 34,000. It is
    possible this had nothing to do with the presence of European
    military skills. It is quite possible that it is purely a
    function of the inhospitable terrain.

30. Singh, Kushwant, Ranjit Singh: Maraharjah of the Punjab,
    London: George Allen & Unwin, pp. 56, 58, 93.

31. Ibid., p. 124.

32. Wilks, op. cit., p. 234.

33. The Sikh artillery was slightly larger in number and in
    weight than the British guns for many of the battles of the
    two Sikh wars. One author maintains that the "Sikh artillery

33. was as good as our own; their guns were more numerous and their
    infantry muskets were the same as ours..." (Gough p. 67). At
    the battle of Ferozashah the Sikhs had artillery of "considerable
    superiority both in number of guns and weight of metal."
    (Gough p. 91). At the other battles: Moodkee, Aliwal, Sobraon,
    and Chillianwalla, Sikh artillery was slightly superior to that
    of the British. It was not until the battle of Gujerat which
    was the last battle of the war that the British gained any
    superiority in artillery. The Sikhs were not unique in this
    respect. The Mahrattas have already been shown to have been
    in possession of large numbers of field batteries. The tradi-
    tionally organized armies also had large quantities of heavy
    guns. A specific example, the Burmese, will be discussed later.

34. Fortescu, John, The Empire and the Army, London, Cassel & Co.,
    1928, p. 253.

35. Banerjee, Anil Chandra, The Annexation of Burma, Calcutta:
    A. Mukherjee & Bros., 1944, passim.

36. Banerjee, op. cit. puts the figure at 25,000. G.D.H. Hall in
    A Short History of Burma, London: Hutchinson University
    Library, 1950, puts the figure at 32,000 plus 8,500 military
    police.

37. Sheppard, op. cit., p. 187.

38. The quotations are from Banerjee, op. cit., pp. 103 and 107.

39. On the Dutch in Indonesia see among others, Hyma, Albert, A
    History of the Dutch in the Far East, Ann Arbor: George
    Wahr Publishing Co., 1953; Palmier, Leslie H., Indonesia and
    the Dutch, London: Oxford University Press, 1962; and

39. DeKlerck, E.S., *History of The Netherlands East Indies*,
    Rotterdam: W.L. & J. Brusse, N.V., 1938.

40. On France see especially, Priestley, Herbert I., *France
    Overseas Through the Old Regime*, and *France Overseas; A Study
    of Modern Imperialism*, both published in New York by Appleton,
    1939 and 1938, respectively.

41. There are interesting modern parallels of this rule. The two
    successful wars against the Communist insurgency of 1948 ff,
    in Malaya and the Philippines, were marked by a radical reorgan-
    ization of military and political operations. In both cases
    political and economic reform was combined with extensive
    decentralization of military operations to provide an effective
    counter-insurgency campaign. Critical accounts of military and
    political operations in Vietnam from 1945 through 1970 agree
    that neither the French nor the Americans learned these impor-
    tant lessons of organization.

42. On the Philippines war see Leon Wolff, *Little Brown Brother*,
    Manila: Erehwon, 1960.

43. For a brief interpretation of the larger historical role of
    metropolitan powers in the decline of empires see Gayl D. Ness
    and Jeannine R. Ness, "Metropolitan Power and the Decline of
    Overseas Empires," Paper read at the American Sociological
    Society Meetings, New Orleans, August 1972.