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Military Capacity in Spring and Autumn

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Abstract. It has been said that the states of Spring and Autumn (0770-0479) deployed large armies, drawn in part from the general populace.¹ But our only contemporary source, the Lǚ chronicle Chūn/Chyōu 春秋 (CC), implies a more limited situation: small elite chariot forces, few battles,² and tactical frugality. The size of these forces did increase over the period,³ but no major state was destroyed by them. I here review the major features of the military system of the time, noting the limits on what it could achieve – limits that were surpassed only by reorganizing the state itself, a reorganization which virtually defines the Warring States Period.

The Spring and Autumn State

The Personal State. The state was closely identified with its hereditary ruler;⁴ an extinguished state could be revived only under a member of its lineage.⁵ The ruler was the default military leader and ambassador. Those functions could be delegated to a near relative,⁶ but only for one occasion. Lǚ and its contemporaries were, and despite late Spring and Autumn hints of proto-bureaucratic form, remained, personal states.

The Economic Base of these states was purely agrarian; there is no hint of trade. The Lǚ chronicle constantly attends to the harvest, insect pests, floods, freak weather, and famines when the harvest failed. Stored grain was the basic resource of the state, and states experiencing famine might seek to obtain grain from another state.⁷

¹For example Sawyer **Seven** 7, Hsu **Spring** 573. These assertions all rest on late sources (Dzwo Jwàn, Gwó Yǔ, Shǐ Jì, Jōu Lǐ) whose relevance to Spring and Autumn is questionable. For the Chūn/Chōu as the appropriate source for the period, see Brooks **Historical**.

²For the rarity of formal two-force military encounters, see now Brooks **Defeat**.

³From 600 to 1,000 chariots for large states, over 240 years; see Brooks **Numbers**.

⁴Compare the ancient Near East. “The acts of the monarch . . . were not attributed to his country acting as a separate person. Ancient law could not conceive of the state as a legal entity” (Westbrook 29); “states were not conceptualized abstractly, but were thought of as synonymous with the person of the ruler” (Ragionieri 46).

⁵Chǔ extinguished Chǔn 陳 in 0531 and revived it in 0528. Other states conquered and later revived were Tsài 蔡 (0534; revived before 0527) and Syǔ 許 (0504; revived before 0494).

⁶Note such expressions as “Tsài third brother” (CC 2/11:4), “Syǔ third brother” (2/15:6). From Wǔn-gūng (r 0626-0609) on, the higher functions came to be regularly filled by members of what by then were separate collateral clans: the Shúsūn, Jùngsūn [later M̀ngsūn], and Jísūn.

⁷The instances recorded in CC are in 0666 (from Chí, by purchase) and 0505 (to Tsài).

State Aims. The states sought to expand by conquest.⁸ Some conquests were internal; Lǚ early consolidated its territory by suppressing its indigenous population.⁹ Farming supports more people than hunting, and save for the ruler's hunting preserve, land once acquired was steadily deforested. Increases in productivity per land area were achieved by double cropping¹⁰ and by introducing new crops.¹¹

The Spring and Autumn Military

Military Arrangements were probably much like those of the ancient Near East, with most of the force distributed among a landed warrior elite who were responsible for local defense and could at need be assembled for campaigns.¹² The ruler, in this indirect-sovereignty system, had direct contact only with the military elite, who in turn oversaw their part of the local rural populace.¹³

The military unit was the two-horse war chariot,¹⁴ with an elite driver and archer plus a few foot soldiers as an infantry screen;¹⁵ these were presumably commoners from the warrior's landholding; a higher-status warrior might dispose of several chariots.¹⁶ The warrior was responsible for cultivating personal skills like archery and chariot driving,¹⁷ and probably also for horse training.¹⁸ Artisans were presumably located in the capital. Musters, recorded for Lǚ in 0706 (ywè 閱), and in 0534, 0531, 0520, 0497, and 0496 (sōu 蒐), would have given field practice during the associated hunt, and also provided an opportunity for review, refit, and repair.¹⁹

⁸Early annexations were small (1/2:3, 3/2:2); later ones larger (7/1:8, 8/2:7, 9/19:3, 12/2:1).

⁹See Brooks **Point**.

¹⁰Floods in autumn 0687 harmed the wheat crop, which had evidently been planted for harvest the following spring; a frost in the 12th month of 0627 is noted as *not* harming a grass crop; perhaps winter barley. That the soybean, a summer crop in modern Lǚ, was a winter crop in Spring and Autumn is implied by the CC entry mentioned in the following note.

¹¹Such as the soybean, first mentioned in the 12th month of 0509 as killed by a winter frost.

¹²Drews **End** 112.

¹³Hence the flight of a ruler with a town, transferring himself *and them* to another state, in CC 2/3:4, 9/21:2, 10/5:4, 10:31:5. DJ calls this "stealing from the ruler," a later perception. The founder of Confucius's family was a Sung warrior who had fled to Lǚ after a military defeat for which he was held responsible (Brooks **Analects** 267).

¹⁴Four-horse chariots are also reported, but were not necessarily standard. An elite Spring and Autumn burial included 10 chariots and 20 horses (von Falkenhausen **Waning** 474).

¹⁵The basic Near Eastern chariot crew was two (Drews **Coming** 86-87). The difficulty of shooting from a moving chariot has been overrated; what one cannot do is drive and shoot at the same time. Creel's idea (**Statecraft** 262) that chariots were mere status symbols is invalid.

¹⁶The horse and chariot were the property of the warrior, and might be buried with him, as is implied by a remark of "Confucius" in LY 11:8 (c0360), and confirmed by Chín burials containing from one to three two-horse chariots (von Falkenhausen **Waning** [CHAC] 494).

¹⁷Sarcastically remembered in LY 9:2 (c0405).

¹⁸According to one Near Eastern manual (ascribed to one Kikkuli, the King's horse trainer), training a horse to face battle is an intense seven-month process (Drews **Coming** 90f).

¹⁹Note the implications of the chariot wheel inventories at Pylos (Drews **End** 107).

Elite Character. The elite nature of the fighting force is shown by the fact that military campaigns were independent of the season,²⁰ whereas walling parties, which presumably drew on laborers from the lower rural population, avoided the peak harvest season (autumn), and to a lesser extent, also the planting season (spring).²¹

The duration of CC campaigns also suggests a force without concurrent farm obligations. For the 07c, the 19 campaigns for which we have information lasted from 1 to 12 months; 23 campaigns of the 06c ranged from less than a month to 7 months.²²

A Single Force. That even a large state could field only a single force is shown by the fact that besieging the city of another state left one's own capital unprotected: one way to raise a siege was for an ally to strike at the besieger's capital, forcing the recall of the besieging force. Thus in 0624, Jìn raised a Chǔ siege of Jyāng 汧 by attacking Chǔ.²³ Also suggestive is the tendency for even large states to make major attacks only with allies, not alone. An extreme example is the request of Jìn for a contingent from Lǚ and, as it turned out, from several other states, for an attack on far western Chín.²⁴ The only instance of two forces being used separately and also simultaneously is the double attack by Chí on Lǚ in 0556, in which one force (led by the Chí ruler) besieged Táu, and the other (led by Chí nobleman Gāu Hòu) besieged Fáng, the seat of the Dzàng clan of Lǚ.²⁵ The combined attack failed, and this stratagem was not repeated within the Spring and Autumn period.²⁶

²⁰The seasonal distribution is spring 22%, summer 29%, autumn 23%, and winter 25%.

²¹For wallings, we have instead spring 17%, summer 34%, autumn 3%, and winter 25%.

²²There is no increase in mobility; travel times were constant for the period. Diplomatic visits to nearby Chí lasted 2 months; to more distant Jìn, 3 months; to distant Chǔ, 4-6 months.

²³CC 6/3:7 晉陽處父帥師伐楚，以救江 “In winter] Yáng Chǔ-fǔ of Jìn led the host and attacked Chǔ, thus relieving Jyāng.”

²⁴In 8/13:1 (Spring 0578), Jìn asked Lǚ for military assistance. In the 3rd month, the Lǚ Prince went to the Jōu capital, accompanied by his escort, which was presumably not the entire power of the state. In the next month, that Lǚ contingent joined Jìn and the rulers of Chí, Sùng, Wèi, Tsáu, and officers of small Jū and T'ing, in invading Chín; the ruler of Tsáu died in the conflict. That autumn, in the 7th month, the Lǚ Prince returned from this adventure; the Lǚ chronicle does not report the outcome as between Jìn (and its allies) and Chín.

²⁵This battle is biographically noteworthy as well: Having earlier distinguished himself at the siege of Bī-yáng in 0563, Confucius's father Dzōu Hí and two others led a picked force of 300 which rescued Dzàng Hí from Fáng, and ended the siege (Brooks *Analects* 268).

²⁶Two CC entries suggest that Lǚ had more than one army: 9/11:1 (0562) 作三軍 and 10/5/1 (0537) 舍中軍. Of all CC entries, only these two use the typical DJ (and Warring States) term for army, jywn 軍, whereas CC otherwise uses shī 師 “force” or “host.” Nowhere else in CC is there a hint of more than one Lǚ force. When, in the reigns of Dìng-gūng and Aī-gūng, two commanders are assigned to one force, the obvious reason is to balance the claims of rival clans (each of which contributes one of the leaders), not to deploy two forces. DJ uses these CC entries as pegs on which to hang a warning of the subordination of Lǚ to Jìn, due to the ill results of just this clan rivalry. The term dzwò 作 “inaugurated” is itself suspect, as are the four CC entries with adverb chū 初 “for the first time” (1/5:4, 7/15:8, 8/1:4, 9/11:1); all but the first are military innovations, or civil innovations in support of military operations. This is a theme of DJ, but one not borne out by the CC. I can only regard these six entries as DJ interpolations in their associated CC text, which in turn was ancestral to all other versions.

Replacement Rate. The landed warrior's position, like the ruler's, was presumably hereditary. This explains the slow rate of force replacement: a slain warrior's normal replacement will have been his son. After the disastrous Chǔ defeat at Chǔng-pú in 0632, not only was the Chǔ general executed, but eight years passed before Chǔ took any military action outside its borders, and this was a siege of the minor state of Jyāng in 0624, mentioned above. The growth of the Chǔ army, from 600 to 1,000 chariots over 200 years,²⁷ amounts to an annual 0.3% increase, which is easily explained as proportional to the amount of new land available for hereditary warriors. The number of warriors thus grew with the area of the state, but not their density *per unit* of land. The landed warrior system was resource-expensive, and this too probably held down the maximum possible size of the force.²⁸

Rapidity. The small chariot force had its advantages, among them mobility. Spring and Autumn military conditions, with warriors dispersed about the state, favored the side that could act before the enemy could assemble a blocking force. And once assembled, a small force can more easily traverse territory. A force too large to feed itself by foraging near its campsite must carry food, and the food wagons increase the size of the force while diluting its fighting potential. They also slow it down. A large army which also maintains itself by foraging must eat its way across a countryside like some huge dilatory locust. We have no evidence for such a situation, and thus cannot posit the existence of such a force, until the late 04th century.²⁹

Improvements in technique were few. Apart from the double attack experiment mentioned above, the only improvement is in siege technique: the time needed for a successful siege fell, over the period, from 6 months to 4 months. The military power available to the large states remained relatively constant during Spring and Autumn.

The Use of Military Force

We then have, for each state, a single small but highly mobile force, consisting of elite chariot warriors with a small foot complement, which could be assembled at need, but which was ordinarily dispersed about the state. How was it used?

Military Actions were less common than has been claimed: 2.06 per average year for all states noticed in CC. None were part of a sequence which could be called a "war;" most were unopposed.³⁰ Of 500 military operations in CC, only 23 were *jàn* 戰 or formal set-piece battles.³¹ The avoidance of battle, and the exploiting of situations where the other state has not yet assembled its force, makes sense if the casualty replacement rate was slow, and if the consequences of a battle defeat were thus severe.

²⁷For this estimate, see Brooks **Numbers**.

²⁸For Egypt, see Schulman 1/296; for Mesopotamia, Dalley 1/416 and Piggott 27.

²⁹Or the 03rd, if the familiar lines in Dâu/Dý Jīng 30, not present in the early 03c Gwōdyèn text, are (as it now appears) a mid or late 03c addition.

³⁰The extensive terminology includes *fā* 伐 "attack," (202, or 62% of the whole), *chīn* 侵 "invade" (57 or 11%), *rù* 入 "enter [a capital]," *wéi* 圍 "surround = besiege," *jyòu* 救 "relieve [a siege]," *chyǔ* 取 "take [a town or territory], and *myè* 滅 "extinguish [the lineage of a state]."

³¹Which amount to only 4% of all military actions in the CC; see now Brooks **Defeat**.

The difference between a small concentrated force and a large but dispersed force is the essence of the Spring and Autumn military stalemate. Rapidity of movement once assembled, together with the elite landholding system of normally dispersed forces, gave an advantage to the attack of a small but concentrated force. During the time between an incursion by the attacker and the assembly of a sufficient force by the defender, the attacker could do what it liked, up to and including the taking of towns.³² The nature of Spring and Autumn warfare favored these opportunistic ventures. But the other side of the coin is that the value of these easily gained advantages was slight. They did not seriously threaten the continuity of any large state.

Conquests of statelets were generally successful and permanent. Of the total of 86 named entities in the CC, 61 were either extinguished or absorbed by larger states by the end of the period. The large if thinly populated southern state of Chǔ was the most successful in this line; it extinguished a total of 15 tiny states. One key innovation necessary to the absorption of conquered territory was the administrative district, later called *syèn* 縣, whose invention is variously ascribed to Chín, Jìn, or Chǔ.³³ With larger entities such as Chǔ, Tsài, Sywē, and J̀ng, Chǔ might win a victory but could not permanently annex the territory. The reason, with Chǔ as with other states, was the opposition of powerful rivals, who were concerned not to permit too great a shift in the balance of power. For J̀ng, often beset by Chǔ, and for some small states nearer to Chǔ, this concern expressed itself in an explicit sense of common interest among the northern states, for whom pivotal J̀ng was strategically vital, to oppose the penetration of Chǔ. Nearby Chǔ and Tsài were annexed by Chǔ, but were restored after a threat by the northern states collectively.³⁴

Between large states, using only their own forces, military results were variable. Jìn, with only its own force, fought Chǔ in 0597 and lost; it fought Chǔ and J̀ng in 0575 and won. Against smaller states, the record of the larger states is little better. Large Chǐ attacked small Jyǔ 莒 a total of 6 times,³⁵ and medium Lǔ 18 times, during the Spring and Autumn period, without destroying either. Nor were smaller successes always permanent ones; thus, Chǐ took land from Lǔ in 0608, but returned it in 0600. Such actions were not so much additions to territory as pawns in a diplomatic game.

Alliances, the only available way of quickly augmenting the power of a state, were temporary. A covenant preceding a joint action did not govern beyond that action.³⁶ There was in general no unity agenda among the Sinitic states, only a multiplicity of separate expansion agendas, amounting collectively to an implied unification agenda. In Spring and Autumn, that concept did not yet exist in a militarily executable form.

³²For a Lǔ success of this sort against S̀ng in 0713, see Brooks **Defeat** 196.

³³For traditional opinions see Creel **Hsien**. Supposed instances of Spring and Autumn *syèn* are based on Dzwǒ Jwàn and Gwó Yǔ retrojections of 04th century administrative practice, and are not necessarily reliable as a basis for inferences about Spring and Autumn conditions.

³⁴For details on the 14 *t̀ng-m̀ng* 同盟 or solidarity covenants, see now Brooks **League**.

³⁵CC 7/11:3 (0598), 7/13:1 (0596), 9/23:13 (0550), 9/24:5 (0549), 10/19:4 (0523), and 10/22:1 (0520). The CC states no outcome for any of these attacks.

³⁶The one clear exception is the *t̀ng-m̀ng* covenants; see n34 above.

The Spring and Autumn Impasse

By the end of the 6th century, the Spring and Autumn states, though growing slowly on the old pattern, had come to a point where gaining further relative advantage was precluded by the nature of the old system. A ceiling had been reached. It was exceeded by transforming the former palace states into resource-management bureaucracies which could handle the logistics of a larger force, and by drawing on the populace for that force. The larger force needed minimal training in hand weapons such as the pike and spear; it could thus be rapidly assembled – and rapidly replaced. It was officered by the former elite chariot warriors, who had previously comprised the entire military force of the state, and who now provided the nucleus of the new force. Thus arose the mass armies of the Warring States.³⁷

The mass army allowed the power inherent in the larger area of the major states to be brought to bear more directly on their rivals. That difference defined the terms on which the wars of unification would be fought over the next three centuries.

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³⁷Compare the covert German rearmament under von Seeckt; Macksey **Triumph** 57f, 63f.