

p.426, 22:1a). Title: Pyŏngje hurok

note: The sog'o system has already been dealt with above. Here I again discuss as an addendum ~~the~~ walled forts (sŏng 城), moats, military vehicles, the raising of horses, postal communications and postal stations and other matters. (end note)

-walls and moats (sŏngch'i 城池):note: I note that even though walls and moats and military vehicles are under the jurisdiction of the Pyŏngbu (兵部 :Board of War), yet since they are like the construction of walls and the making of vehicles, then they basically are under the responsibility of the Tongwan (冬官)(Minister of Public Works)

- . With regard to ~~whether~~ walls (fortifications), ~~the exact quantity for~~ ~~investigating~~ whether they should be large or small, this should be investigated and carried out in accordance with what is appropriate (to the circumstances). (note: Even though it may be said that a wall should be small yet strong, (the fact is) that the walls of the adm. towns in our country are too narrow and are not sufficient to accomodate more than one or two villages (places where people live) and thus are extremely worthless (without meaning). Given this situation, we ought to expand them, and in the case of newly constructed ones, we must investigate the actual situation (sasil) and do it in accordance with what is appropriate.

(the area contained within the)
Indented section: I note that if/walls are too broad, then it is difficult to defend them. If they are too narrow and small (in their dimensions), then they do not accomodate (enough people), and this is why we should regard as precious (important) that which is in accordance with the system (? should build walls to accomodate the population and the defensive requirements?). In ancient times, 5 p'an (板 boards?) made up a (堵) (note: 8 feet was called a p'an 板), and 5 chŏ (堵) was a (雉) (note: 200 feet); 100 (雉) made up a wall (sŏng 城) (note: 20,000 feet).

Defensive walls walled towns

optimum size

military system, suppl. -2- Pyŏngje hurok

p.426, 22:1a. (note: 6 feet make a po (步 :pace); 300 paces make a ri (里), that is to say, a circumference of 11 ri, 33 po (paces), 2 feet. 100 (千) is the system of (territory occupied by?) the kung-hou (公侯 :dukes and marquises).

22:1b)

The 1,000 ch'i (万) of the Son of Heaven, the 100 ch'i of the kung-hou (dukes and marquises), the 70 ch'i of the po (earls), and the 50 ch'i of the counts and barons (cha-nam) were all (included) in the land within the royal territory (kinae chi chi 畿内之地), which was 1,000 li square (on a side), and its wall was ~~1000 li~~ 1,000 ch'i, or one might say that it accomodated (contained) 100 (areas) (surrounded by) walls of 100 ch'i)(end note)

-the land of the kung and hou (dukes and marquises) was 100 li square and the walls (around it) was 100 ch'i (千).

-the (land) of the earls was 70 li and their walls were 70 ch'i

-the (land) of the counts and barons was 50 li, and the walls (surrounding it) were 50 ch'i.

-In addition, under the Chou system, the walls of the Son of Heaven were 12 li square (note: in circumference, 48 li); those of the dukes were 9 li (36 li in circ.), of the marquises and earls 7 li (note: 28 li square), and of the counts and barons, 5 li (note: 20 li ~~in circ.~~ in circ.).

-In general, according to the Chou-li, the land of the chu-kung (dukes) was 500 li square, that of the marquises (chu-hou) was 400 li square, that of the earls 300 li, and that of the ~~counts~~ counts 200 li, and that of the barons 100 li. Under the system of the two ages (dynasties), even though they contained (elements) ~~w~~ that were not the same, each of them had standards of measurement and appellations for land (area) in accordance with its size. Therefore, at the present time the walls of the chu and kun (districts) also ought to be established in accordance with calculations of the amount of land and the number of people and animals (minmul 民物).

426, 22:1b)

The mountains and valleys in our country are not level, and in many instances adm. towns are located in places where they use mountains as walls and barriers and it is difficult to make things uniform as if it were flat land. What we ought to do is take into

22:2a)

account the intent of the ancients and require that (the system of topography walls) does not go against what is proper in terms of the lay of the land.

check other volumes of the Pyongyang transl.

Also, I note that in the historical accounts within the walls of Suyang (睢陽 :) there were several tens of thousands of people living there. And within the walls of ch'ŭkmok (即墨 :) there were over a thousand oxen. Suyang was a large city during T'ang times that was truly reflective of the flourishing (of the age). As for Ch'ŭkmok, it was a town attached (to?) various countries (yŏlguŏk sug'ŭi 列國屬邑) and for three years it suffered hardship, and still it was able to obtain more than a thousand oxen, so that from this one can understand how numerous the population was during peacetime. If it had not been so (i.e. not been so securely defended by walls?), then even though they had/(changsun 長孫 : extended patrols?) and chŏntanŏk (田單), they still would not have been able to defend them.

The walls of the towns in our country are in a bad state of repair and in many cases they cannot even accomodate (the defense of) a single person. If things are like this, how can we hold people responsible for defense? In general, with regard to walls and moats we must calculate and decide on standards and regulations in order to allow for residential areas (within them) for the people.

(note: In our country there are many district towns that have no walls at all, and those that do are too narrow (in size) and barely accomodate many people's residences. In addition there may be walled (towns, areas) that are in places separate from the seat of the town government. This is severely inappropriate to the circumstances.

426, 22:2a) I once saw the Chou-shu (history of the Northern Chou) which said that the seat of government of Koguryô was P'yôngyang-sông, but that even though they had granaries and armories inside the walls for defense against ~~the~~ invaders, it was only when something ~~the~~ happened that (people) would enter the ~~the~~ city in order to protect the king, so that they had their homes in separate places beside (the walls) and they did not live permanently (inside the walls). In general^{legacy}ly, this was a ~~legacy~~ of the customs of the i and jung (夷狄) barbarians, and to the present day they still seem to follow this custom without having completely changed (abandoned) it." (end note)

22:2b)

-. In building walls it is necessary that it not be done during ~~agricultural~~ agricultural (cultivation) season. In calling out the soldiers, it always must be done in accordance with standard regulations~~x~~ when you assign them for duty. Be careful not to have irregular levies (of duty) or extra service. (note: Labor service on wall construction must be done during the winter during the agricultural slack season; you cannot mobilize the masses (people) at the wrong time interfering with their agricultural work. If it is a question of minor repairs and small jobs~~x~~, then you may use the kyôngbu (傭夫 : Pyongyang ed., p.156--i.e. those who owe 3 days of labor service a year) or hired laborers (koyôk 雇役 : Pyongyang p.156 translates this as saks-kun (sakkun). If it is a matter of reconstruction or new construction on a big job, then call out the soldiers (chobal kunsâ 調發軍士). First calculate how big the job is, and then determine the able-bodied men to be used, and only call out the regular soldiers (chônggun 正軍); do not also call out their support personnel (po). In the case of infantrymen (pogun 歩軍), for every 30 days they serve they will be exempted one ~~the~~ turn on duty and from the examinations and archery tests (munsüp-cho sisa 同習操法射). In the case of cavalrymen and sog'ogun, then for every 15 days of (construction duty) exempt them

426, 22:2b) from one year's worth of training (sŭpcho) and archery tests. In all cases the official will give them on ten-day week's worth of rice, or 3 tu of rice. And when they are released from work (when it is finished), also provide them with a banquet to send them off.

When there is work to be done on walls, calculate the distance ^{soldiers} from the job and assign ~~people~~ from nearby districts, and assign them to go to the west wall. It is not necessary to gather them all at one time and cause them ~~g~~ bother and difficulty. Consider the number (of men required) in accordance with what is appropriate. Each turn should not have more than one thousand or several thousand men. Allocate them in order, divide them up into sub-units. Do things clearly and do ^{laziness} not overburden them and do not allow any delays in the time. If the work is not completed on time, call a halt to it and wait until the next year and do not try to rush the work. Just be patient so that the work is firmly (well) done. As for the soldiers who are assigned to construction from each adm. district, even though they will be under the command of the commander (chujang 主將) in the place where the wall is to be built, in each case their commanding officer (changgwān 將官) will lead them to the job and supervise their work.

If there is a construction job where monks are to work, then they ought to be assigned to the job in accordance with regulations, and also calculate and fix the days of service for them. For details, see the section on eliminating (excessive) monks.) (end note)

Indented section: I note that when soldiers are assigned for construction duty for one month, exempt them from two months of (regular) tours of duty and also exempt them from tests and training. Since they are

427, 22:3a) provided with rations and support personnel, there should be no difficulty (burden) involved in using troops for construction labor service. Since the number of duty soldiers of the capital and the provincial military commanders' yamen are very numerous and during peacetime they

p.427, 22:3a) have no urgent duties for defense, you may ~~plan~~ in accordance with what is appropriate transfer them and assign them for construction duty.

As for their rice rations (while on construction labor), calculate and retain it the grain-transport tax revenues (chose ^{海稅} ~~that is retained~~ in their home district, and also transfer the support rice of the basic soldiers and this should be sufficient for meeting their expenses. If the place where the pobu (保夫: support personnel) live is near the capital but at some distance from the district where the wall is to be built, then in accordance with standard regulations collect support rice from the capital and exchange it for other rice from where the site (of construction) is for payment to them. If it is done like this, then even though soldiers are used for construction labor, there will not be any special burdens.

Calculate who is working hard and who has been at rest, and in those places where walls ought to be built, every few years have walls built in order (of precedence), and (if you do this), there also will not be anything which is not done right (incorrect). (note: The people of our country are lazy and lax by nature (aguk insim ^{the} ~~single~~ ^{我國人心怠慢} and they are always careless in everything they do and they dissemble (pingga ^{憑假}), so that the construction of walls and moats is very shoddy. With things like this, even though every district has a wall, how is it of any advantage? At the present time it would be better to combine the effort (expended) on the construction of 10 walls to build a single one in the hopes that it would be firm for a long time. (If you want to accomplish that), ~~then~~ you must follow this system. Since the custom of the people has been to be slipshod ~~for~~ and this has been the case for a very long time, it is very difficult to enlighten them just with the use of words alone. You must first build a wall in accordance with (my) system in one place, and then have (people in) other place see what has been done and ~~adopt~~ adopt the method. If then they suffer one invasion, then perhaps they will truly

427, 22:3a) understand the advantages and the habits (of the people) will ~~not~~ also be changed.)(end note)

22:3b) Indented; I also note that in case of major construction projects involving the building of walls, in case the resources of the home district are not sufficient to complete the job, the court will have to transfer power (resources) from neighboring districts (kun) to do it.

In ancient times (the past?), such as the building of walls in ~~Ma(xxxxxx)~~ Hyŏngsŏng(邢域) and Ch'ogu(楚丘), in both cases they combined (the resources) of the chu-hou (feudal lords) to do it. Even though the soldiers engaged in construction were under the general command of the chujang(主將 :commander) at the site of the wall, each had to be led by the commanders of the place they came from who divided up the labor among them. Not only was this appropriate to the circumstances, but it made the construction work easy to complete. It was also the way in which the ancients carried out tasks that they combined (the work) of large numbers of people and also were concerned about unexpected incidents that might occur (and gave thought to it in advance).

--. In building walls, you should not call out the soldiers too frequently and force them to rush the work at ~~one~~ one time. You should consider the territory (land) and the work to be done and divide up the people in assigning them labor service. The workers on the job should be

divided up into left and right armies (units) and each should be assigned a commander and each ten men should have a p'aejang(裨將 : squad leader) (note: You may take the basic unit commander and keep him in charge, or you can select someone from among the workers and designate him the commander. Every 5 men should have an ojang(伍長).

If it is done like this, then definitely it will be in accordance with law. Also for every 30 men designate a top'ae(都裨).)(end note) For every 100 men establish a kamjang(監將). (note: You may also establish a pyŏlchang (special commander) for every ~~xxxxxx~~ 500 or 1000 men in accordance with the circumstances.)(end note)

22:4a)

p.427, 22:3b) Have each of them take responsibility for their construction & (projects) in the hopes that the work will be long lasting and strong (walls wont fall down). Every place (where construction work is done) will have an inscribed (stone monument). If it should happen that in the constructon something is done contrary to regulations or if the piled up stones overturn (fall over), then immediately order reconstruction to be done. In any case where the wall disintegrates within 10 years (from the time of construction), (the person in charge) will be indicted for criminal action (nonjoe 論罪). Each will lead his own troops and take ~~xxx~~ their own responsibility for providing rations. Prior to any reconstruction, the matter must first be reported (to the authorities).(end note)

Indented section: Tu Yu (杜佑)'s T'ung-tien says: Generally in building walls, if the height of the wall is 5 chang (丈), the width at the base should be 2 chang 5 ch'ŏk and the width at the top should be 1 chang 2 ch'ŏk 5 ch'on. Then the way of calculating the work is to add the bottomwidth to the top width, which gives you 3 chang 7 ch'ŏk 5 ch'on. Divide that in half, which gives you 1 chang, 8 ch'ŏk ~~xxx~~ 7 ch'on and 5 pun, and then multiply it ~~xx~~ (sŭng chi 乘之) by the height of the wall which is 5 chang. Thus what you need for a wall that is 1 chang high would be 93 chang 7 ch'ŏk 5 ch'on. The daily work requirement for each laborer would be to construct 2 feet of earth. If you calculate the work to be done, it takes about 47 men to do it. One pace of wall (po 步) (equivalent to 5 ch'ŏk or feet) requires 235 men. A wall that is 100 paces (po) takes 23,500 men. A wall that is 300 paces takes 70,500 men. If you compare ~~w~~ these figures with one li (equivalent to 300 po or paces), then you calculate what you need in terms of earth and how many loads fo build a wall 10 li long.

(Tu Yu~~x~~ also said), If a wall ~~and moat~~ is 2 feet wide at the face (top?) and 1 ~~feet~~ deep, and 1 foot at the base, then you take the upper

p.427, 22:4a-b) width and add the lower width and divide in half, which gives you 1 chang 5 ch'ōk. Then if you multiply this by the depth, which is 1 chang. And then you dig out a moat of one ch'ōk, this gives you 15 chang. The daily work of one man is 3 chang so that the job requires 5 men. If (the wall) is one pace long, then it takes 25 men; if 53n paces, then 250 men; if 100 paces, then 2,500 men, and if 1 li, then 7,500 men. If you calculate the rate on this basis, then you can figure out ~~what~~ (what it takes) to build (a wall and moat) 10 li long.

(note: I note that this takes ~~under~~ under consideration the work required for building an earthen wall on the flat plains of China. If you are building a wall out of stone on a mountain or high precipice, then you also ought to take into account the terrain and how difficult the work is in ~~making~~ making your calculations. Recently I hear that when the Ibam (^山 ^崗) mountain wall was ~~built~~ rebuilt, the western border was 2,000 paces and more than 6,000 monk troops were used. It took them 11 days of carrying stones to build the wall before the work was completed. For every 2 paces of wall the work, in easy places, took 3-4 men and in hard places 7-8 men. In general it took 6 men for every 2 paces of wall, and this was a repair and reconstruction job. If you are building a new wall, then the work would take 30 days. On the basis of this, if you were to have a high wall with a deep moat, it would not be like the low and weak walls of today, but would be strong and long-lasting so that every two paces (of wall construction) would take 12 men working 30 days, it is said.)(end note)

Indented section cont.: I note that in recent times when mountain walls are built, in many cases the troops are called out for a period p.248, 22:5a) of 10 days to complete the work, but given the fact that the walls crumble every year, there is no end to the repairs and work requirements on the people, and yet still in the end the wall crumbles and the walls are a laughing-stock. What hope is that (they would be of any use) in defending

p.428, 22:5a) the country and protecting the people? If the situation is like this, we would be better off not to have built the walls at all. It is only that the Namhan sansŏng is somewhat strong and finished and can be relied on (is dependable), but this was a construction job that took 3 years to complete. But at the time/^{many of}the officials and clerks were not skilled in the regulations for building walls and moats;~~and~~ they could not make calculations of the work required; and they did not realize that walls once built can still crumble and have to be rebuilt. More than half the work had to be redone. Therefore in fact ~~xxxxxx~~^{what should take} one year's worth of construction work actually wastes 3 years worth of time, it is said. If you look at the problem on the basis of this, is it all right that those in charge of the work do not first study the regulations (pertaining to construction)?

I also hear that with regard to the construction of walls recently, from the clerks and changgyo (officers) up to the yŏngjang (commanders), everyone takes bribes and either reduces what is paid to the troops or on the pretext that they have to provide gratuities for face or to the commanders? (chimyŏn-ye, kyŏnjangnye ^{知面礼 見將礼}) they exact food and drink and collect cloth in lieu of service and wear out the soldiers so that their difficulties they have to bear are so bad that you can't talk about them, they say.

22:5b) In general, at the present time, no rations are provided to people on labor service and they are not exempted from their basic tours of duty, and all of this is due to the levying of construction labor service and there is no worse suffering (than this). But these people (clerks and officials) only know how to gouge the people this way. (note: There are none of these evils among the monk commanders of the monk troops, they say.) One can see that at the present time the commanders (changnyŏng ^{將領}) and clerks (isŏ ^{吏胥}) from youth to old age devote all their minds to becoming practiced (in this corruption)

428, 22:5b) and regard it as standard (practice). They have no feelings of shame over what they do, and any matter they touch is always done this way. Alas! If you don't select responsible men and do not rectify men's minds, then no matter in the world can be done (right). I do not know what is worse if people think that they can carry out construction tasks without first realizing they must clarify the ruler's virtue and establish kyohwa (the transformation of men's minds to morality).

At the end of the Koryŏ dynasty, the Hŏnsa (專司) requested of (the king) saying: With regard to the mountain fortresses in the provinces, the state from time to time sent officials out to build them and called out many soldiers. The work was done after a few days, but the walls crumbled and the problem was severe. From now on no officials (commissioners) should be sent out. Have the magistrates call out troops from neighboring kun (districts) to do the construction work during the agricultural slack season, and if the work is not done in time, then suspend it and wait until the next year to do it! This was made a yearly regulation.

-. In general the height of a wall should be 5 chang or more. (Note: this does not include the (塼^{mound} :base?). The wall around the capital must be 6 chang or more. If it is a wall on top of a mountain, then

22:6a)x calculate the height in accordance with whether the place is precipitous or flat. Use the Chou foot, which consists of 10 d'ŏk for 1 chang.

In the Chi-hsiao hsin-shu (紀効新書), even though it says that the height of walls are 3-4 chang, since this refers to the official foot (kwanch'ŏk 官尺), it is in fact double the size of the Chou foot. (end note) The height of the (塼:archery target mound?) should be 1 chang, ~~the base of the wall is 4 feet~~ and 4 feet out from the base of the wall you should dig a moat which must be 4 change in breadth and 2 chang deep, or more. (The deeper and wider the better. It's even better if you fill it with water.) (end note) The sides of the

note:

428, 22:6a) moat should be lined with stones. The walls should be ^{about the same} ~~extended~~ from the base up to 2 chang, and from 2 chang up, it should be sloped gradually.

(note: Japanese walls are like this). With regard to the ch'i (雉) and Ong sōng (瓮城) and Umajang (牛马墙) (types of walls?), in all cases rely on the methods in the Chi-hsiao hsin-shu. (Note: According to the Hsin-shu, every 50 (堞: kak'wi--archery turret?) there is one ch'i (雉)). You ought to reconsider the topography in doing it. In general, the ch'i should project out from the wall by 4-5 chang, and where they are built it should be 6-7 chang across in length.

雉 pasapet

Within the walls of the moat, build the Umajang (ox-horse wall) in this method. In the case of mountain walls where the terrain is steep or where there are moats with water that is deep, it is not necessary to have the Umajang. If these conditions do not prevail, then you must have them. It is even better to have cannon turrets in place of the ch'i. For this system, see below. If it is like this, then it is not necessary to have Umajang.) (end note) Have a road extending out from outside the moat (note: the road should be 4-5 chang wide), and do not permit people to build houses within a distance of 300 paces from outside the walls. (note: In the case of the capital walls, then 400 paces; 100 paces in the case of mountain walls in steep places) (end note) Also do not allow houses to be built within 20 paces of the wall on the inside (note: 30 paces in the case of the capital walls).

If the wall is in a flat plain, then it is not necessary to have the inside flat; you can allow inside and outside both to be high. (note: the shape is like a chang (wall) but thick. The walls of China are like this.) (end note)

22:6a-be.

If the place is located in the entrance to a valley, then you ought to build dikes inside and outside the wall and make moats. (note: In general if a wall is built by taking advantage of a mountain and extends to one side of it touches on the plain, then you ought to dig out a moat on the

428, 22:6b) inside and outside and make it deep and wide. In general a place where the strategic water is steep is no different than where the mountains are steep; both have their advantages. Anyone who builds a house within the prohibited area outside the wall will be given 100 strokes and the house destroyed.) (end note)

Indented section: I note that in our country the mountains ~~are precipitous~~ are precipitous and the rivers narrow and the walls of the district towns of the prefectures and districts are always close by the base of a mountain and (the people) don't like being repressed? (被其所壓為嫌) : Pyongyang, p.161 translates this as, "this is regrettable". Also the people find it difficult to build walls straddling valleys. This is only done because it suits the situation (terrain). It is not necessary to regard the straddling of valleys (streams) as difficult. I once read an account where in the south of China it said that such walls as in Chchiang and Sohung (浙江) straddled great rivers and where they had 3 or 4 water gates and where the ships could go in and out of the gates. Even though the strength (resources) of our country does not extend this far, still we ought to do it and each (town) do the best it can. If the circumstances permit, then we should straddle streams and river; there is no need to be afraid of it.

429, 22:7a --. If the height of a wall is 5 chang, then the width at the base is 3 chang. After the wall is built on the inside and outside, then earth ought to be added to fill up the interior. Care should be taken not to have the stones resting on the earth or vice versa. If the wall is completely built of stone and made thick, then even though there might be a fierce rainstorm, it should last for a long time without crumbling. If you have stone on the outside and earth on the inside and you let the stone rest on the earth, then even though ~~even though~~ the stones and earth are mixed together on the inside, when it freezes in winter the earth will crumble, and in the summer rains, the earth will get wet, and before long it will crumble. If the inside and outside are both high, like the

p.429, 22:7a) Chinese system of building walls, then the width at the base should be 8 chang, and the width at the tope should be 3 chang.)(end note)

In constructing the base of the wall, you must dig out the earth deep and broad and make it strong and lay out a large foundation stone on top of which you place 3-4 ch'ök (feet) of stones in height (note: from this point on the wall will slope). Then you put earth on the outside... (note: In the case of walls built into mountains, when you dig out the foundation, you do not lay it into the back of the mountain but keep the mountain outside the wall, and after that you put the turrets on top and dig the base wide and deep and make it strong, as in the correct method. (end note) From the waist of the wall on down, then you carve out large stones and lay them across in double thickness. ~~above the waist~~ Above the waist you pile up small stones and fill in the holes with pebbles and cement. (note: If you do it like this, then not only will it remain strong for a long time, ~~but~~ Even in places with lots of stones, before the wall is half built you may run out of stones and will be forced to transport more from distant places and for this reason will spend even more effort. Therefore the effort involved in finding small stones will be much less than in transporting them from distant places. According to Ch'ök Namtang (威南塘: Han, 4, p.167: ~~威南塘~~ ^{Ch'ic} Chi-kuang (威繼光), the author of the Chi-hsiao hsin-shu ^{紀效新書}), small stones are the best, larger stones are second best. This remark is really correct.)(end note)

(the upper wall)
As for ~~xxxxxx~~ (kak'wi ^堞) (note: that is, yöjang ^{女牆}: a smaller wall on top of a söng) it is necessary to make that out of bricks (tiles) (石磚) ^{石版皮} small ~~stones~~ mixed with cement (sökhoe). (Note: When you make the

22:7a)

stones (cement), you must do it in accordance with the method in the Chi-hsiao hsin-shu. If you use stones (instead), then it will be difficult to conform to the (Chi-hsiao hsin-shu's?) system in terms of (the ^{opening} mouth of the kak'wi? (intervals between archery turrets? ^{turret} and the bottom hole? ^{and the bottom hole?}), and also they will easily tumble and disintegrate. In our country the height

堞口 and 懸眼

429, 22:7b)

of the parapets (kak'wi) on top of walls is (only) several ch'ōk ~~high~~ high, which is barely enough to reach a man's waist and (the soldiers) are not able to avoid the balls (missiles) of the enemy. The intervals between these turrets ~~(~~xxxxxx~~?)~~xxxxxx~~xxxxxx~~ are too wide and allow (the enemy) to get through ~~xxxx~~ with plenty of room left over. Also, the base of the ~~p~~ turret is in the shape of the character, san (mt. 山), which makes it easier (for the enemy) to mount it and cross over. Also it is extremely bad/to have a hole high up and no "suspended hole" (hyōn'an--down below). We ought to make these turrets one chang in height (10 ch'ōk?), and the turret hole should also be half this height, and the interval between turrets should be narrow with both sides ~~xxxxxx~~ having a ridge (脊) to make it convenient to look to and shoot to the left and right, and we should change the high hole and make it into a low hole (hyōn'an). Only after we do this well we have made walls the way they should be. All the details (pertaining to this) are in the (Chi-hsiao) hsin-shu.

Furthermore, in recent years the cement (sōkhoe) used on walls has been smeared over the outer surface and within one or two years it crumbles and none of it is left. It is nothing but a waste of the people's labor and in fact is not worth a split hair's value. If the cement is not put on ~~f~~ right, then it would be better to do it on one side only and then wait for next year's labor service period when it would be necessary to smear on the cement.) (end note)

咸南塘

Indented section: Someone asked of ~~Hsi~~ Ch'i Nan-tang (Ch'i Chi-kuang): There is an established system prepared for (building) walls and moats. If we follow the methods laid out in (your) Hsin-shu, we would be changing (the old system) completely and our resources would not be sufficient (to accomplish this). How about that?

方屈學贏

Ch'i replied: This system (of mine) does not require that we completely change the old (ways). How could I not observe that our strength

p.429, 22:7b) might not be sufficient to accomplish the task (Pyongyang, 4, p.163 translates this as : "How would I not be concerned about ~~that~~ the fact that our strength would be insufficient and progress would be difficult). That is to say, when building new (walls), we definitely can not do it (in the old way). If a wall collapses (圮), you repair it; if a moat fills up with dirt (填), you have to change (repair) it. Can't you do it in accordance with this (my) system?

Of course it is difficult to change the old walls themselves (in their basic form), but the parapets (turrets) and their spaces are not expensive (to fix). Can't they be (fixed) according to my system?

22:8a)

To remove (and completely renovate) walls during peacetime would earn the resentment of the masses. But if the enemy arrives and you act in accordance with the desires of people and consider plans for ~~the~~ renovating the walls, would it not be possible to do it in accordance with my system? If you change one foot's worth of wall, you get one foot's worth of benefit; if you change one chang's (yard's, 10 feet's worth) of wall, you get 1 chang's worth of benefit. It is only that is should be changed at an appropriate time. At the present time, with regard to the walls around the 3 tun (屯) in Kyeju (薊州 : near Peking) and the wall around Chunhwa-hyŏn (遵化縣), as in the manner of the new construction and old northern all (Kobuk 古北 : great wall)/repairs have been made in various places, all in accordance with (my) illustrated method, which shows that what I say is not empty talk; it is action taken advance of events (war), for only if people anticipate things in advance can they succeed in doing things.


Quote of
Ch'i
Chi-Kuang

--. The construction of ^{guns} ~~artillery~~ ~~turrets~~ turrets on walls is a matter of prime importance. The method of doing it is the same as for building ch'i (礮), except that for ch'i (archery turrets?) you must be able to look down to the left and right to fire arrows, but in the case of cannon, you have to have the wall empty (open) right down to its base

p.429, 22:8a) to accomodate many people. You have to have many holes in the wall to the left and right and in the front. (note: The three surfaces should all be made with bricks and mortar (cement), and in making holes, you should make the outside narrow and the inside broad to make the firing of guns easier. Also on top of the hole, you should add one chikpong(two stones?) as in the case of the Umajang (ox-horse walls) so that it would be convenient to look out. When making the bricks, in all cases use molds to do so.)(end note) (next section specifies what kinds of guns to put in the lower, middle and upper holes in the wall, and also directs that bowmen should shoot arrows from the top.) If the enemy approaches by the right wall, then guns should be fired out of the ~~right~~ hole on the right hand side; if they approach by the left wall, then fire the guns from the left side hole; if they approach from the front... If it is done like this, then no matter how many walls there are, you can defend them with the use of several hundred men and still have enough (strength) left over. One wall should not have more than about a dozen gun turrets, and even though the enemy might have a million men, they would not dare draw near.

22:8b)

(note: In Sōae's Chingbirok (西厓, 徵事錄: Yu Song-nyong) it says: All the ancient type walls had ch'i (女位) turrets. These ch'i are what we call nowadays the koksōng (曲城: curved walls). If a wall does not have these ch'i turrets, and one soldier is placed in each kak'wi (堞) ~~space~~ space to defend it and stands his shield in between these kak'wi (turrets) to block off the outer surface from the arrows and stones of the enemy, when the enemy approaches the base of the wall, they will not be able to see them and defend against them. According to the Chi-hsiao hsin-shu, for every 50 kak'wi (堞), you place one ch'i ~~promontory~~ promontory? (part that sticks out from the wall) and it should extend outward by 2-3 chang. Two of these ch'i will be separated from one another by 50 kak'wi, and each of the ch'i will

429, 22:8b) cover 25 of the kak'wi. This will improve the force of the arrows fired from the kak'wi (archery turrets), and you will be able to see to the left and right and make it convenient for firing and the enemy will be prevented from approaching the wall at the bottom. During the imjin waeran (Hideyoshi's invasions), I was at Anju, ~~xxxxxx~~ and one day I went out to the Ch'ŏngch'ŏn River to think where I thought of this stratagem. The exterior of the walls ought to conform to the lay of the land, and we ought to build walls with promontories sticking out in the shape of () like the ch'i system. And we should empty out the interior to accommodate people. The front face and left and right (sides) should have gun holes dug out so that you can shoot the guns from ~~xxxxxx~~ ^{two} the middle. And on top build/gun turrets (on the wall) separated from one another by 600 or 700 paces or a thousand paces and keep steel ^{by} (stacked) (iron) cannon balls loaded ~~xxxxxx~~ the big guns/like chicken eggs. Then when the enemy approaches the walls, he will be hit by a cross fire from the guns. Not to speak of men and horses, even metal and stone could not escape being pulverized by this. If it is done like this, then even ~~xxxxxx~~ though other leaves (sections? of the wall) were not defended by soldiers, all you would have to do is to have several dozen men man the gun turrets and the enemy would not dare draw near. This is truly the most skillful method of defending walls. Even though this method is based on the ch'i (promontary) system, yet it would be even more effective than the ch'i, and the enemy would not dare approach in between the double ^{so-called} turrets. Thus both the/unje(雲梯) and ch'ungch'a(衝車) methods should not be adopted (used)."

At the time this was memorialized and adopted, ~~and was first begun~~ later in the ~~Kyŏnggŏng~~ royal lectures it was discussed several times in order to convince people that the method should be adopted, and yet up to the present time we have continued to delay things and it has not yet been carried out in a single place.) (end note)

P. 430
22:9a
check glossaries in other volumes of Pyongyang translation

p.430, 22:9a)

Indented: During the imjin wars, Yu Sŏae (Song-nyong) presented a memorial with ten recommendations for military strategy (~~khakchŏnksugi~~ chŏnsu kiŏi ¹²²戰守機宜). In the section on defending walls, he said: "The people of our country are extremely ~~xxxxx~~ unused to (unskilled in) war and when it comes to the construction of walls, we also ~~xxx~~ have had no thoughts on this. All we do is to follow the advantages provided by our mountains and follow the winding paths of the mountains in making shapes (of the walls?), and that is all. According to the wall system of the ancients, for every 50 kak'wi (塼) turrets they had one ch'i (雉) promontory sticking out from the wall. This so-called kak'wi (塼) is equivalent to what is today called the Nyŏjang (女牆), and the ch'i (雉) is equivalent to the koksŏng (曲城) of today. Since the height of the kak'wi turret is 1 chang or more, the people inside it are ~~ix~~ able to stand alongside one another at ~~wixx~~ their ease in order to block arrows and stones which are fired from the ~~ix~~ front. As for the Yŏjang walls in our country, there are scarcely several ch'ŏk (feet) in height and the defenders of such walls have to bend and crouch over at the waist and lie down in order to proceed along (the top) and they cannot avoid the missiles of the enemy. This is the first thing wrong (with our wall system).

22:9b)

The space between the parapets (kak'wi 塼) should be narrow, just barely sufficient for one to fire arrows and look out, and that is all, so that the enemy should not be allowed to be able to climb in. This would be the way to have the system of wall construction done with fine (precision). But with regard to the walls ~~xxxxxx~~ of our country, parapets in the case of the yŏjang (女牆) : ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~, the space between them is too wide and accommodate ~~xxx~~ several people. This is the second thing wrong (with our walls).

Koksŏng (curved walls--i.e. the use of jutting out portions) is also extremely rare (in Korea). Only one or two of them are put in on top of? a wall. And even in the case of the large wall around the capital,

p.430, 22:9b) only outside the East gate is there an ongsŏng(甕城 : check other volumes of the Pyongyang transl①)there is not a single koksŏng (promontory) and there are no ch'i-type walls. Of what use are they (our walls)? This then is the third thing wrong with our walls.

Even though we have men who defend the walls on top of them, they are not able to stretch their necks to look down, so that there is no way for them to prevent the enemy from approaching to the base of the wall. In recent years, the system of lower holes (hyŏn'an 懸眼 (in the parapets) has been introduced into China. According to this method, a hole is bored within the parapet and leads directly to the outer part of the wall allowing (the defenders) to see the enemy beneath the wall so that they can wipe them out. This system is extremely good. It is only that it requires the making of a lot of bricks and tiles before it can be built, and at the present time it is difficult to carry this out quickly. In addition, (the Chinese?) have the system of the Umajang (牛馬塔). Outside the walls in the moat they build a wall which is 1 chang in height, and at the base of the front they dig a large hole to allow the firing of large guns. In the middle they dig out a small hole to allow the firing of small guns, and they use particularly courageous men to defend them; and together with the men fighting on top of the wall they make a combined strong fighting force. The Chi-hsiao hsin-shu says that by relying on them, even though an enemy of a million comes to attack (there is no problem in defeating them). But not only does this require the use of much labor; it also requires the use of special men to defend them, and it is not something which an easily ~~best~~ talked about ~~could~~ in our country given our current strength (resources). If we were once to establish gun turrets, then the above-mentioned koksŏng (curved walls, promontories), hyŏn'an (gun holes), and Umajang (moat walls) could all be combined with it, and it would not require us to bother the people's labor power. It would be extremely simple

22:10a)

p.430, 22:10a) and easy, and nothing would be lost (disturbed) by doing it. (end of Yu Song-nyong)

Cho Chung-bong (趙重峯) returned from a trip to China as envoy and submitted a sealed letter to the king which said: I have observed that the entire area from Liao-yang west to Shan-hai-kuan is very close to the Mongol Hu (barbarian, Manchu?) territory. This area is adjacent to the Great Wall and they have built a long wall with a moat with one ^{light, torch platform} smoke tower (烟臺) situated ~~xxxxxx~~ every 5 li at the base of which they have a small, square wall, and at the top of the ^{platform} (tower) they have a house. At the four corners of the wall there is a p'aeok (牌屋) on each roofed over with tile. Outside the wall they have dug a moat, and outside the moat they have constructed two or three a wall; and outside the wall they have ~~x~~ deep holes, and outside these holes they may plant a row of ~~x~~ willow trees. Even though the Mongol troops may rush to the attack in a mass, their strength is not sufficient to break through. Inside the wall they usually have 5 soldiers with their families defending it. They provide them with monthly salaries (note: 2 1/2 liang of silver), and each of them cultivates the empty land ~~in~~ adjacent to the wall in order to provide production. When there is an alert, the people living on the seacoast are called in to defend it. Every 15 li they have one small shop, and every 30 li they have one large shop. As they wall gets larger (longer), the people living there gradually get more numerous. (note: soldiers are also stationed in places like oxen grazing estates, and in the winter months, these are increased to a thousand soldiers)(end note) They are fully provisioned with weapons and defensive preparations are completely taken care of. In places where the wall has crumbled, the officials pay silver out to repair them. Within the passes, even though they have no smoke towers or towered walls, there is no place without a shop every 15 or 30 li. And there is no pref. or district wall and moat that ~~xxxxxx~~ is not strong. No matter how strong the enemy may be, they have no fear of them.

torch towers?

22:10b)

p.430, 22:10b) Because the Ming court has established defensive facilities in an area of danger to them (in Manchuria) in this fashion, even in a time of danger, they can trust to their great (strength?).

In our country in the two northern provinces, even though we have a long wall, horses can still jump over them. Even though we have smoke towers, the people cannot live there. (note: Not only are there no walls above the towers (where the towers are), but there are not even thatched roofed dwellings there.) (end note) And when the fierce winds blow and the rain and snow fall, many of the troops who are wearing unlined clothes freeze to death, and even before the enemy troops arrive, many of them turn and run away. Who would be willing to fight to the death (under these kinds of circumstances)? Furthermore, the condition of the walls in the districts and garrisons are ~~in even worse~~ in even worse condition. If the Mongolian invaders were to come, all would be able to issue one shout and jump on to the walls, and the people defending the walls would be alone and desolate (susae ^{蘇索}), so that even though all the men and women might be assembled, they would not be able to defend even one corner of the wall.

And as far as the southern provinces are concerned, along the coast where the pirate ships can draw near, the bamboo fences of the fishermen are in many cases strung out like the teeth on a comb. As soon as the pirates land, they immediately burn and destroy them. If in such harbors we were to build walls and place armories there for strong defense in case of attack, then the Japanese bandits would not dare to leave their ships to land. However, if you might want to build walls and mobilize the power of the people completely, even before the construction of the walls and moats were finished, the people (would be exhausted) and would not be able to defend them. ^{According to what I hear,} ~~In my humble opinion,~~ the provincial military (army) commanders in each province every ~~x~~ year ~~should~~ store private ^{by} rice to the amount of a thousand sŏk. _{on their own}

p.431, 22:11a) and only use it to meet private requests. In addition, there
22:11b) is so much cloth and silk that is stored up to no useful end that
one could not count it all. How much worse is this since the yearly
cloth revenues of the Ministry of War is in many cases empty. If the
people who become Ministers of War and provincial army commanders
have the will to act on behalf of their country, but do not give a thought
to managing production (resources), then they should dis ribut this
grain and cloth to recruit starving people to work on the walls
and complete a section every year. The king should also contribute
resources from the Naesu (royal treasury) in order to supplement what
is lacking, so that even if the border commanders might be extremely
stupid men, they, too, would be impressed by the king's sincerity and
would compete with one another to pay out the goods they keep for private
use in order to build walls.

Pyongyang 4, p.392 Kang Hang (姜沆) said: When I was in Japan I saw the Japanese
prisoner of Japanese; walled towns (castle towns). They would certainly build them on top
wrote the of single mountains, or by the shores of rivers and the ocean or on
Kanyangnok (姜幸鏡) of single mountains, or by the shores of rivers and the ocean or on
returned in 160peaks. They would carve out the walls steeply so that the enemy
could not scale them. The base of the walls were broad and the top pointed.
On the four corners they had high turrets, the highest of which was
three stories, and the commanders lived in them. Storehouses for weapons
and food were all establishin within the turrets. ~~XXXXXXXXXXXXXXXX~~

* 22:12a) A single gate would open out onto a single road to allow ingress and
egress, and outside the wall they built a long wall that was 1 chang
in height, and every few paces along this wall they would put a gun hole.
They would dig a deep moat outside this smaller wal about 8-9 chang in depth
and draw in the waters of the river to fill it up. Outside the moat they
also built a wooden palisade. In places along rivers and the seacoast, boats
were strung together. Crack troops went around the walls and lived there.
(note: When I asked them the reason for this, they responded: As for the

p.431, 22:12a) tops of solitary mountains, we can look down and the enemy cannot approach to attack us. As for (the walls) along the river and sea coasts, they are used only to defend one side and so they do not require much strength for defense and you get double the effect. The reason why the base of the walls are broad is because it makes it difficult to destroy them. The reason why they are pointed at the top is to make it easy to look down. The reason why ~~the~~ there is one gate leading out to one road is so that the effort in defense is not divided. The reason why we string boats together along the river is to defend the water route. The reason we have crack troops going around the walls and living there is so that they may be summoned quickly to come inside and defend the walls.) (end note)

Our country's walls and moats are the exact opposite of these.

During the chŏngyu year invasion (丁酉:1597), when the Japanese bandits took a look at the walls (walled towns) in Honam (Chŏlla province), there was no one who did not laugh at the ~~unevenness~~ unevenness (lack of fit ^{朝陽}). But And when they ~~and~~ saw the kŭmsŏng (金城:gold wall) at Tamyang (潭陽), they said, "If the Koreans had firmly defended (this), how could we have captured it?"

22:12b) It is also my opinion that the mountain fortresses (walls) in various places are far off from the adm. towns, and when trouble comes, only then ~~do~~ do they take in the people of the villages and have them enter the mountain fort walls. When the force of the bandits (invaders) has slackened somewhat, the stupid people are only concerned about their family property, and afraid of the dangers involved in a ~~far~~ distant trip, are not willing to enter (the fort) to defend it. And then when the force of the bandits approaches, they take the elderly and the children and fly like rats into hiding in the mountains and fields and are also not willing to follow orders. How much less hope is there to get them to defend neighboring towns?

p.431, 22:12b) In recent times, the Horyŏng sŏngŭp (walled town of Horyŏng) has been completely destroyed. The best thing would be to take advantage of this fact ~~x~~ and move ~~xx~~ it (the construction of a new one) to Tamyangbu at the Kŭmsŏng sansŏng (mt. fortress) and also remove ~~xxx~~ the people from several neighboring villages (where it is now) and (move them to the new place) to increase (its strength). Then when the bandit (invaders) come, it can be defended by means of these men and this walled for. For an official to defend it, we must select a man of talent in governing the people and defending them, ~~xxxxxxxxxxxxxxxx~~ ~~xx~~ and keep him in office for a long time and hold him responsible for achieving success. We should also move Chŏng'ŭp (井邑) and Changsŏng (長城) to Ibam (立邑), also in the same manner. When it comes to the various mountain fortresses in the Yŏngnam region, if we make all of them sites of government administration, then we should restore military colonies (tun) to keep watch over one another so that they can rely on one another's power, and if so the bandits will not dare again to invade/as they did before." (end quote)

Indented: Now I (Yu) refer to the words of Kang Hŏng, which say that the ŭp (adm. towns) must be moved to the mountain fortresses, but this has been difficult to completely carry out. Also his opinion that the walled forts must become adm. towns and places of residence is truly a profound and true opinion. We must take account of the

p.432, 22:13a) circumstances (of each place) and take measures (to do it). In general, with regard to those mountain fortresses which could be made into administrative towns, we should move towns there to make them adm. towns and build walls around them. Those places that can be defended with walls should be expanded and repaired and designated as walls to be defended. This must be made a uniform regulation. As for other mountain fortresses at which adm. towns cannot be established and which are not important places, they should all be abolished. And adm. towns that are in bad condition

p.432, 22:13a) should be eliminated and attached to neighboring towns. What we must do is to have people exert effort in peacetime (to put these mountain fortresses and adm. towns in good shape) and make them into areas that must be defended when war comes.

At the present time, during peacetime we work the masses hard and spend resources * so that the strength of the people has already been used up, but when war approaches, they abandon the place and run off and leave things in confusion. Not only is this because crooks are appointed as officials and the people are fearful and weak, it is also because planning is shoddy and simple and there is no single and fixed plan. If you put things off in peacetime, when war comes you will have nothing to depend on, and that's why it is this way. Could anything be worse than this? Unless the current way of doing things can be changed, we would be better off without any walls or administrative towns at all, and better off not to ~~xxx~~ require the labor of the people (to build them).

22:13bx)

I also note that it is ten to a hundred times more difficult (to build?) walls in mountainous and precipitous places than on a flat plain, and because the places where mountain fortresses are located commonly have many high, precipitous, and dangerous places, the people cannot live there, but if you could establish an administrative town there, then of course there could be no better place than that. In cases where you cannot move an adm. town (there), the best thing to do is to build walls (around the town) on the plains and defend it. This requires that you investigate ~~the~~ the topography and inquire what is convenient to the people when you make plans and determinations. If (we were to adopt) a system like those of the Japanese, then we would only adopt their walls, moats, and turrets with their height, depth, and strength, and boats lined up and that would be all there was to it. With their small walls perched on the tops of the hills, ~~w~~ you would only have a single gate.

p.432, 22:13b) If the people did not live inside, then it ~~xxxxx~~ would be a situation similar to the earthen caves of the Japanese or the mountain fastnesses of the Nü-chen (北虜) --not something that can be carried out in ~~xxxxxxx~~ territory devoted to the preservation of the state and the security of the people (體國莫民). For this reason, if you have a mountain fortress but cannot establish an administrative town there (with people living in it), it would be preferable to build a solid walled town on the plains. Even though the walls would be said to be small but strong, you still would have no choice but to provide streets and alleys (for the residences of the people). Some might say that for defending walls, nothing is as good as precipitous terrain. If you want to defend a walled administrative town, then if you do not have a precipitous place, how can you do it? To this I would respond that the basic purpose of a wall is to defend an administrative town (ü) just as a bamboo wall is used to protect a person's residence. But because in our country our adm. towns are rundown and there are many mountains, we have our administrative towns and mountain fortresses located in different places. This is an extreme case of our not understanding what is fundamental and what is peripheral. Generally speaking, if you build your walls in a separate place (from the adm. towns where the people live), when war comes and you first take the able-bodied men ~~from~~ living in the administrative towns and lead them (to the fortresses to defend them), they are not willing to go. Or if they do go, they find empty walls ~~in~~ in which they do not feel at ~~th~~ home (their feelings do not fit the circumstances of the new place 離家), and the people who do go there have no feelings of attachment (to the place), and one after the other they run off, so who will stay and join them in the defense of the place. In my view, in their old homes during peacetime, they rely on the official granaries and the people and goods and would defend them together where each man gives thought to his parents and

22:14a)

p.432, 22:14a) his home, and where they share all advantages and disadvantages in
 and
 common. If they have to defend mountain fortresses, ~~then~~ they must
 completely abandon their towns with their granaries, resources, people,
 and livestock to the enemy. And then they must alone defend the mountain
 tops, and in the end what do they have to go home to? It is a method
 which almost necessitates their taking flight. This situation (that our
 people are in) is completely different from that of the Japanese and the
 Nüchen (北虜) who only make war their only occupation and are always in
 camp without their families, and who make shooting (the bow) and hunting
 their way of life and who wherever they go build redoubts on the tops of
 mountains.

22:14b)

Furthermore, attack and defense are basically mutually interrelated.
 You must be able to attack before you are able to defend. 8 Our people
 live in peace and do not know ^{what to do} ~~how~~ to defend their people and train
 as soldiers. (Our officials) only know how to act as creditors and
 collect cloth (from the soldiers), which ~~they~~ is their usual occupation,
 and when they have to react to an invasion, they ~~gxxxoffxxx~~ avoid (fighting)
 and go off to a high and precipitous place, rest at ease, or run off
 like rats, and in the end do not dare go outside the gates to take a
 look at what is going on. With things like this, then even though you
 were to build an iron wall up to the heavens, you still would ~~not~~ not be
 able to defend it. Alas! This is something that is difficult ~~for~~ to tell
 the man mired in custom (the ordinary man, sog'in ^{俗人}) ~~xxx~~;
~~only~~ only men of intelligence understand it.

(note: Even though mountain fortresses are located in high and
 steep places, if you want to send the troops out on the attack, then the
~~path~~ path from the mountains down is not easy, and it is not easy to
 take advantage of opportunities. And also, once they are down on the plain,
 then (the soldiers) lose that ~~by~~ which they have to rely on (the mt. forts)
 and they are no better off than field soldiers (soldiers who fight on the

p.432, 22:14b) plains), but because they are basically men without homes and feelings of attachment (to the place where they are fighting), it is even easier for them to run away.

(note cont.) Some might say that the people of our country usually talk about (the advantages of?) mountain fortresses. They also say that walled forts ought to be narrow and small, and if they happen to be in a place that is not very small, then they all want to rebuild it and make it smaller. People like Chang Man (張晩:Pyongyang, 4, p.399. The governor of the two provinces of Honam and Yŏngbuk during Hideyoshi's invasions, a man of much accomplishment. During the reign of Injo he became the Towŏnsu for the 8 provinces and went to Pyongyang. Later on he was responsible for the pacification of the Yi Kwai rebellion and received the title of Oksŏng-buwŏn'gun, and later was appointed the Toch'ech'alsa (supreme commander) of the 8 provinces.) in recent times is a so-called famous general, but he, too thinks this way. How so? To this I would reply that it is not just Chang Man who is like this. What Sŏae (Yu Song-nyong) also talked alike this. In general this is because the district adm. towns in the present time during peacetime are all in a poor state; they do not have many people living in them and they are all in poor condition. The so-called walled town have poor people and rundown walls in them. If all of a sudden they meet an enemy invader and have to defend them, then they cannot do so for more than half a day before they surrender. They have to run off to a high place in the mountains to take advantage of the precipitous rocks before they are able to make a stand to some extent. But all the people scatter in the four directions, so that able-bodied men have to be led (to the fortresses), where they enter empty forts, but they only rest there and are not able to defend them. Because this is the way they see things before their eyes, that is why they must think this way.

433, 22:15a)

p.433, 22:15a) In particular they do not give a thought to the way of acting patriotism on behalf of their country. We ought to establish regulations and rectify the system (of wall construction, of town defense?) and rectify the system of local administration, and combine the present-day small adm. ~~towns~~ towns that are in decrepit condition. If we do this, then for every hundred li of territory there will be a kun'ŭp (kun adm. town) to keep things in order. Also provide salaries to all the clerks and petty functionaries. And if also with regard to artisans and merchants we cut off the path for extorting money from them, then the people will gather to live in the district towns and the houses will be lined up ~~like~~ like the teeth of a comb, and we will set up a market area for shops just like the towns in China. This will enable the walls and moats also to include the streets and lanes of (people's houses); and they ~~will~~ ^{must} be tall and deep and strong just (as I have described in my) system. If we do it like this, then in peacetime we will be able to keep watch over all matters, and when war approaches, the defense of the walls will also be firm and true. Only after things are done this way can we get the proper kind of defense in every place. (The proper defense of individual ~~towns~~ towns ~~will~~ will be such) that the situation will be interconnected and the whole country will by this means be strong forever.

depressed
commerce in
towns because
of official
depredations

But in our country the thinking of the people has never extended to this (got this far). Since ancient times there have been numerous cases where district towns have defended themselves firmly even for a year or several years. In remote ancient times ~~was~~ this was of course the case, and even a little while ago even though the town of ~~Kŭmju~~ Kŭmju-sŏng (金州城) ~~was~~ ^{and beseiged} in Liao-tung was located on a flat plan and was surrounded/by the Niŭchen soldiers (虜兵) for three years, yet still it did not surrender. Yet in the case of isolated mountain fortresses where the people have to be suddenly rounded up to defend them,

p.433, 22:15~~aa~~) in the space of only a few months they run out of provisions and all the people run off and they cannot be defended. How could it be hoped that they could hold out for more than a year. From this one can also see what the advantages are (of creating a system of fortified towns on the plains). Generally speaking it is definitely a correct policy to ~~w~~ build walls around district towns. ~~if you~~ For anyone to say that you should /establish empty walled forts in a place separate from where the people live in the district towns is only the worst kind of thinking (on this question).