LINGUISTIC GEOGRAPHY OF THE 宣化 HSUAN-HUA REGION (察哈爾 Chahar Province)

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INTRODUCTION

The Chahar province was part of the 河北 Hopei province till its erection as an independent province in 1929; it was suppressed on November 15th, 1952. A few years ago I explained in what circumstances I started a dialectal, folkloristic and historical survey of the Chahar province in 1947 and 1948. (Bull. Société Ling. de Paris, XLVI, 1950, p. 129 and p. 132). It was never resumed because of political obstacles.

Sponsored by the Catholic University of Peking, the 1948 trip served also another purpose: it was the beginning of a training in the methods of linguistic surveys for a student of mine 王輔世 Wang Fu-shih. I gave him a 15 words questionnaire, taught him how to use it in the villages of 宣化 Hsüan-hua prefecture, stood near him taking notes myself during the whole trip. That material was meant for his M. A. dissertation. After my departure from China in November 1948, I received a letter from Wang Fu-shih in the spring of 1951, announcing me the completion of his dissertation at the Peita University under the direction of Professor 羅常培 Lo Ch'ang-p'ei. I proposed at once to help him publish it; postal communications with foreign countries were cut off around that time, and no further word was received.

However from publications issued in Peking, I have been glad to find Wang Fu-shih's name among the members of the "中國科學院語言研究所" Linguistic Bureau of the Academy of Sciences of China. He has been mainly active in linguistic surveys of the non-Chinese people of the southwest.

This material gathered jointly by Wang Fu-shih and myself is of no world shaking importance. However it countains some interesting little problems and there could be no more fitting person than Professor Chao Yüan-jen, our leading Chinese dialectologist, to whom I would rather present the homage of these my last Chinese dialectal maps.

The material was never discussed between Wang Fu-shih and myself,

as I left China shortly after returning from our joint trip. I suppose however that his dissertation, if it ever comes out, will give all the necessary background from historical phonetic sources. My purpose is more modest: for each map I will try to point out what the Hsüan-hua dialects can teach us about the linguistic structure (synchronic point of view), and then try to see whether the geographic dispersion of the dialectal facts can tell us something about how the present situation came into being (diachronic point of view). The whole is meant as an illustration of the geographical method.

Chapter 1: The territory and its language.

From July 7th to August 30th 1948, we explored, mainly on foot, the northern fourth of Hsüan-hua prefecture; this is the only part shown on the maps. Every locality in that area was visited, 115 in all (the prefecture as a whole has 420 villages); but for the dialectal survey, we limited ourselves to the following 63 villages. In three cases, we went to villages in the neighboring prefecture, which is then indicated between parentheses.

| 0 | 0770 | | (-He- × mx) | Ca | 251 | 一片立广河 | |
|----|------|-------|--------------------------|-------------|------|-------|------------------|
| CZ | 270 | | (萬全縣) | | 351 | 南新渠 | |
| Cz | 278 | 高家屯 | (萬全縣) | Cz | 351a | 太師灣 | ana shaawat. |
| Cz | 279 | 七里茶儿 | F ar easur bridge | Cz | 352 | 陳家莊 | alenta kataberat |
| Cz | 279b | 前屯 (首 | | | 353 | 沙嶺子 | |
| Cz | 307 | 沙灘 | mari retist a fre | Cz | 353b | 朱家房 | |
| Cz | 307a | 陳家房 | allo eld lo neciale | Cz | 353c | 宋莊子 | |
| Cz | 309 | 二台子 | | Cz | 355 | 八里莊 | |
| Cz | 309a | 清水河 | H od 音讀 Tue | Dv | 83 | 北甘莊 | |
| Cz | 310 | 鵠鷄地 | (Hu tu) | Dv | 83a | 梅家營 | |
| Cz | 311b | 老鴉莊 | (Lao Wa) | . Dv | 84 | 何家沿 | |
| Cz | 315a | 寧遠堡 | (pu) | Dv | 85 | 殷家莊 | ti savawaki |
| Cz | 315b | 姚家房 | C adl to aredin | Dv | 85a | 大辛莊 | e dide afte un |
| Cz | 315c | 駱家房 | | Dv | 89 | 大倉蓋 | satust phases |
| Cz | 315d | 井兒房 | | Dv | 95 | 西旺山 | |
| Cz | 316 | 姚家莊 | Wang Postab | Dv | 96 | 東旺山 | |
| Cz | 317 | 劉家坑 | it countains si | Taylor DA | 98 | 李家莊 | |
| Cz | 318 | 屈家莊 | nosted muttil | of our Dy | 122 | 定興堡 | (pu) |
| Cz | 319 | 西榆林 | Latin of asign | logoda Dv | 122a | 雙廟子 | ar-jen, our le |
| Cz | 319a | 東楡林 | ialectal raspet | b esent Dv | 122b | 蔡家莊 | homage of a |
| Cz | 320 | 南莊子 | helyvěch Wang | blastica Dv | 123b | 路家房 | (Lou) |

| | Dv | 125a | 趙家窰 | Dv | 163a | 侯家廟 | |
|-----|----|------|-----------------------------|----|------|-----|---------|
| | Dv | 125c | 元台子。we have sounded not all | Dv | 164 | 紅廟子 | 製土、由年 |
| | Dv | 125d | 姚家墳 | Dv | 164a | 趙家營 | |
| | Dv | 126 | 北樓兒房子 | Dv | 164b | 土山窪 | (wa) |
| | Dv | 127d | 馬家窰 | Dv | 167 | 泥河子 | |
| | Dv | 128 | 宫心. | Dv | 170a | 徐家房 | |
| | Dv | 133a | 東泡沙 | Dv | 171 | 小幔嶺 | |
| | Dv | 138 | 後幔嶺 | Dv | 171a | 大幔嶺 | |
| | Dv | 138b | 東深溝 | Dv | 173a | 佐家營 | |
| | Dy | 139 | 下葛峪 (yü) | Dv | 176 | 北台子 | |
| | Dv | 139a | 姚家營 | Dv | 178 | 半坡街 | (chieh) |
| 900 | Dv | 163 | 二台子 | | | | |

The complete list of all the villages in that area, with their romanized names may be found in my report on the rural temples (Folklore Studies, X, I, Tokyo, 1951). The numbers attached to the villages run from left to right in each square of the map; the system was explained in the Yenching Journal, 35, 1948.

The population of the explored area is approximately of 36 000 inhabitants; in addition the county seat, Hsüan-hua city has about 30 000, but for our dialectal survey we choose villages in the vicinity of the city, Dv 126, Dv 127, Dv 163, to avoid the influence of the mixed urban population. In the same way, the villages Cz 270 and Cz 278 may be taken as representative of the Kalgan city language. Kalgan, 張家口 in the northwestern corner of the map, had at that time about 150 thousand inhabitants, and belonged administratively to the neighboring 萬全縣 Wanch'üan county.

To give an idea of the distances, a kilometer and 里 scale has been drawn in the left corner of the map. The whole map, inside the inner frame is 23 miles, 300 yards wide, and 28 miles, 100 yards high, or 654 square miles (exactly twice New York). From Hsüan-hua city to Peking, the distance as the crow flies is 141 kilometers (87 miles) exactly southeast.

The language.

Roughly speaking the dialects of the northern part of Hsüan-hua prefecture belong to the north Shansi system of dialects, which starts about 200 km west of Hsüan-hua (vicinity of Tatung 大同 city), and degrades slowly east of Hsüan-hua going towards Peking. A few striking characteristics may be noted here:

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Tones: 1=only one 平聲: middle or high falling, long: 41:

3=a 上聲 : high 5:, but because of preceding or following

word is often 45:, or 54:, but always short.

4=a 去聲 tone: low rising, long 1234:

5=a 入聲 tone: abrupt, with glottal stop and medial (fugitive)

vowel; the glottal stop is dropped when a second syllable follows; it is always unstressed. Like the 輕聲 of Peking, its height varies with the accompa-

nying words; alone, it is high.

Nasals: no nasal consonant, [n] or [n] is heard at the end of the syllable; speaking in terms of Peking dialect:

-ang, -eng, -ung, -ing, are: $[\tilde{a}]$ $[\tilde{e}]$ $[\tilde{b}]$

-an, -en, un, -in are: [\vec{\varpi}] [\vec{\varphi}] [\vec{j}] [\vec{j}]

-ien, -üan are: [js] [qs]

However it is in the present Hsüan-hua area that this tendency, very strong in Northern Shansi, starts to show some exceptions; but as yet only in the cases of [ce] and [-jø], which appear occasionaly with variations as [-ce] and [-iv].

Initial w- has a tendency to be labiodental [v], and final [-zə] (子) to be [ðə]. Initial [ŋ-] is used for what in Peking is zéro; 安 an; and which further west (30 kms before reaching Tatung) is [n-].

In daily conversation the vowels and the 入聲 are the greatest obstacle for comprehension for Pekinese speaking people; the first week of the survey, I had to interprete for Wang Fu-shih. However, being linguist, the system of phonetic correspondences once grasped, he became quickly used to the Hsüan-hua dialect, except of course for the lexical differences, specially for the technical words pertaining to rural life.

For the survey, the following list was made up with words for which many lexical variations could be expected:

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- 1. butterfly (the common white variety)
- 2. magpie
- 3. woodpecker
- 4. dragonfly
- 5. lizard work but forced A league? In the note and make to be seen
- 6. ant retensite within wet a regist of an enter and market to
- 7. house centipede (grey)

- 8. bat
- 9. dung beetle
- 10. toad
- 11. tadpole
- 12. grasshoppers (a large green and a small brown)
- 13.
- 14. we (exclusive)
- 15. what?

I shall discuss in the same chapter the maps which present similar problems. For the reader interested in general linguistics, a summary at the end will give some conclusions, shorn of the technical details.

Chapter 2: The plural is archaic: I and we. (map 1).

Spoken Chinese has one pronoun for the first person singular (although idiomatic usage allows to drop the pronoun altogether in many cases), and two different pronouns for the plural, one which includes the person spoken to, and one which excludes him. In Peking "I" is [wo], the exclusive plural is simply made with a plural suffix [women], the inclusive plural is [dzamen]. For the plural too, one may drop the pronoun in conversation, but more rarely. The fact remains that each plural form has only a 50% chance to be used as often as the unique singular form.

The first striking fact in the Hsüan-hua area are the two forms of the singular pronoun: a western ³[ŋœ] is only found south of Kalgan (see the squares on the map) and the rest of the territory has ³[wɔ] (the circles). This boundary seems very firm: Cz 315d, the last [wɔ]-village happens to be a completely catholic village since about 2 centuries, and the inhabitants consider [ŋœ] pronoun as a badge of paganism, because it opposes them to the neighboring Cz 315c. The two cultural elements, religion and language, have by coincidence a common boundary and they become identified in the speakers' mind. This boundary is actually part of the bundle of dialect lines which will be met often further.

I have crossed again this [wɔ-ŋœ] boundary in my Tatung survey, but in the opposite direction; there [ŋœ] was east and [wɔ] west dialect. In other words, the pronoun [ŋœ] is found in the following counties: in Chahar: 萬全縣, 懷安縣, 陽原縣; in Shansi: the eastern part of 天鎮縣 and 大同縣. On both sides of this 50 miles broad territory, [wɔ] is used, but of course with a

short high tone, whereas Peking has low rising (214:) (See 自然と文化, Kyoto, III, 1952).

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The inclusive plural is here of the same type as in Peking, with the regular local phonetics: [dzam@]. However the case of the exclusive plural is far from simple.

The crosses on the map indicate the plural [ŋœm@]. In the western [ŋœ] area, it makes for a simple pattern, where singular and plural are only opposed by a [-m@] suffix; it is the Pekinese system but with the local phonetics. But east of this territory, the singular [wo] finds itself opposed to a [ŋãm@] plural; note that that the vowel [a] is short, but has the stress. Exception is Cz 315c which has sing. [wo] and plural [ŋœm@], a clear case of western influence; another interesting variant was found at Cz 318 and Dv 122: [pam@] with glottal stop.

This [ŋãm@] now is practically the only plural known in the explored area, till we reach the extreme eastern villages, both in the north (Dv 95, 122, 122a) and in the the south (Dv 138, 171a, 176). A small circle in the large one shows the presence of the plural [wɔm@], with the singular [wɔ]. The village Dv 122 has given both answers, as the mixed signs indicate. We also met a speaker of a village about 5 miles east of the area of the map, and his answer has been indicated in the right hand margin.

squares on the map) and the rest of the territory has "[wa] (the circles). This boundary seems very firm: (b. 186, the last [wa] village happens to

The fact that the singular [wo] is more often used than the plural, explains its more rapid progress; it swept away as a rising tide the older [ŋœ], and left untouched the layer of the older plural [ŋɑ̃mæ]. By this evolution, the normal Chinese zero /[mæ], sing./ plur. opposition has made place for a completely arbitrary couple of oppositions: [wo] /[ŋɑ̃mæ]. This situation is not stable in the long run, as the Second and Third person pronouns have still the zero/ [mæ] system for their plural.

We may say then that the plural [wom@] that crops up in the east is not in all cases the vanguard of a large eastern dialect area; one may expect that the dialect in isolated localities would start on its own the use of the plural [wom@], re-built from the singular [wo] in use there.

Chapter 3: The ant and the noun-suffix 兒 [@f].

Spoken Chinese has substantives with "diminutive suffixes", the most frequent are [-zə] 子 and [-œ+] 兒. Each dialect has its own idiomatic use; for instance Peking will say [xwœ+] "a moment", written: 會兒. Professor Chao's Concise Dictionary writes "B-1", meaning the word is bound with the suffix 兒. Another dialect may use [-zə], written 會子 for the same word. As a rule no free interchange of suffixes is allowed in the same dialect. There are of course substantives without any suffix.

The case of the tadpole.

In the Hsüan-hua area this word is found under two forms: [kə ¹tœ4] in 17 villages and [kə ¹towð] in 38 villages. These two are completely mixed on the map, without showing any discernible geographical pattern. This seems to be a word for which freedom of choice between the two suffixes is permitted. We will not give here the map of the tadpole material. It may be interesting to list here the rest of the material of tadpole:

Cz 351a: [1mwo 3 fow 8]

Dv 83 [ju set set]

Dv 83a [mwo soe soe]

I wish to draw the attention to a group of villages with the following reduplication: [kə¹towtow], in Cz 270, 278, 279b and 315b. This phenomenon may be compared with the similar case of the magpie.

The case of the magpie.

In the greatest part of the Hsüan-hua area the magpie is called: [¹çi ³tɛjuzə] with stress on first syllable. The suffix [-zə] seems to be mandatory, except for villages where the suffix [-œł] was found: Cz 309a, 311b, Dv 164, 164a and 173a. In addition some villages gave the word without any suffix: Cz 270, 307, 307a, 320, Dv 125d, 138b, 171, 171a.

In summary the names of the magpie, like those of the tadpole, show no fixed pattern in the use of the two noun-suffixes.

But the use of the reduplicative ending is found here too, and broadly speaking in the same territory. Here are the villages where the magpie is called: [\$\figsi^1\text{tejateja}\$] (stress on second) Cz 278, 310, 311b, 315a, 316, 318, 352 and Dv 83. Except for 278, not one of these villages is found on the list at the end of the tadpole paragraph, but the general area is the same: south of Kalgan and extending along the 清水河 Ch'ing-shui-ho (the Kalgan river)

and then eastwards toward the hills. Because of irrigation canals in the northern half, this river is perennially dry, except after summer showers and is used as a road. We are going to find this area on several of our maps.

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Our map 2 shows the names for the ant distributed into clearly distinct areas. The west has [¹ma³jœ¹] (stress on first) with the [-œ¹] suffix; the east and the south have a form without suffix: [³ma¹ji] (stress on second). The two forms on the map seem to act toward each other as two completely different lexical varieties of one word, with the western form gaining ground; it has bypassed several villages and is already crossing the hills at Cz 316 and 352 toward the enclosed plain of the Liu-ho river.

For the linguistic conscience of the speakers, such a clear difference of usage between forms with or without suffix constitutes the normal rule. It came as a surprise to find the names of the tadpole, of the magpie and of the lizard (see further, map 8) make exception. A limited survey done by my graduate students in the city of Peking (Spring 1947) showed the use of suffixes strictly observed by most speakers; even when two different suffixes were in use, it was found that the difference rested upon a difference between young and old generation. I would like to see this whole problem tackled by the Chinese linguists. In a work like 呂叔湘 's 中國文法要略 (1951), I, 16, the problem is only stated, but not statistically analyzed.

Let us take a look at the ant-map from a wider angle. In my Tatung (North Shansi) survey, I found the names [ma pjs fœt] or [ma ma pjs fœt] for the ant, and my friend 橋本萬太郎 Hashimoto Mantarô of Tokyo University tells me that still further west the city of 朔縣 Suo-hsien has [ma pjǐ fœt]; this element [-pjs fœt] is also met in the names of the bat, not only in Tatung, but even in our present Hsüan-hua area; see also Monumenta Serica, XI, 1946, Peking, p. 220, and chapter 6 below.

If a great part of the west has [ma pjs fœl] names for the ant, the present Hsüan-hua names [ma jœl] and [ma ji] do not belong to that family, but are related to the Peking name ma-i, written 螞蟻.

Chapter 4: Why does the butterfly go with the dung beetle? (maps 3 and 4)

In his Concise Dictionary, Professor Chao gives for the butterfly the Peking pronunciations: hu² tieh² as a reading form, and hu⁴ t'iel³ as the spoken

form; in addition to the difference in tones, there is the opposition [t]/[tç].

For the common white butterfly, the Hsüan-hua dialects have commonly [¹xu³tiœ¹] (see the small circle on map 3). In four villages, we heard the so-called aspiration, which here is a strong fricative [ç]; these villages are: in the west Cz 315d, 317 and 353b, in the south Dv 167, Besides these, in four more places, the children used the form with the fricative, and the adults the other; this has been indicated on the map by combining the two signs: Dv 138, 139a, 171 and 171 a; in the last one, even the children used the two kinds of pronunciation. But in absolutely all cases, the tones were 1 平 and 3 上, as described above.

on the new form experty as it would take a completely different name for

these insects, as we will see happen be some of the fallowing many. Now

Before going further with this map, let us turn to a more humble insect, the black dung beetle. There is a large variety of this coleopter which rather looks like a tank; this impresion is maybe due to the fact that the rural dialect (Tatung) which I spoke longest called that variety [txã kə lā]!....The small variety however is quite common; his is the office of public scavenger who makes large spherical pellets out of animal droppings and before burying the pellet, lays one egg in the center for hatching the next spring. The literary langage calls this beetle sis, and the philosopher to whom 莊子 is attributed had already some praise for him: 蟛娘之智在於轉丸!

The name of this insect in the Hsüan-hua area is [8sĭ4pā nju] in which [sī] is "faeces", and [pā nju] is understood as "winged cow". This "cow" seems to be used also in other combinations to designate thickset or squat insects. (map 4).

Here again a number of localities have an "aspirated" form [\$si *pxã nju] with a strong velar fricative; this form is found in the west in one village only: Cz 351, in the south and east: Dv 133a, 138, 139, 171a, 164a, 167, 178. There is finally one more striking similarity with the "butterfly" map. Here too the adults and the children have each their own pronunciation in the following villages: Dv 122b, 127b, 163a, 164, 164b and 171.

lottop fredg will the the passants in the content part of this area take then include. The may been hered the properties of the new forms. This doct

Putting now these two maps along each other, one cannot fail to conclude that the same causes must have been at work to produce identical results in two words that have no natural or linguistic relation with each other. In each case a newer form has recently been introduced in the area. The use of that form by the younger generation constitutes only one proof of that fact; another proof is found in compact the shape of the area with the old form, which is evidently the first occupant here. I think we may safely presume the existence of a larger area with the new forms in the south and western unexplored part of the map; it is from that direction that the few isolated cases in the west must have come.

The most important point I want to make here is: the progress of an "aspirated" form in an area where there was none before, is a process of borrowing, not of internal phonetic evolution. The younger generation takes up the new form exactly as it would take a completely different name for these insects, as we will see happen in some of the following maps. Now comes the question: from where do these forms come?

In the Hsüan-hua area of 1948, with the Japanese military occupation (since 1937) barely over, and the Communist guerillas in all the mountains around, there was no possibility that the school system could work normally. The children we met there during the survey certainly did not pick up new language forms through official schools or any other form of Peking influence. Besides, there are three large prefectures and several mountain ranges between Hsüan-hua and Peking. Moreover if the aspirated [xutçjœt] is also found in Peking, there is no "aspiration" in the names of the wings ch'ih⁴ pang³ 翅膀 in Peking.

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This kind of very detailed dialectal survey is surely wonderful to bring to light the incredible variety of dialect currents at work in one area; but the trouble is that a limited survey as the one we did around Hsüan-hua flushes more new problems than it helps solve old ones. For instance it is well known that in this part of rural China, the young children stay for several years under the exclusive influence of their mothers and grandmothers, and learn thus their dialect in an exclusively feminine world. One would like to know from where the peasants in the eastern part of this area take their brides. That may have helped the progress of the new forms. The fact remains that we don't have enough here to go on to propose a complete explanation of these maps.

A last remark: Kalgan and its vicinity seems to be here a conservative

area. Hsüan-hua city however is already reached by the new forms on the "dung-beetle" map; we may expect that the influence of the county seat will help push this new form in the future.

Chapter 5: What character would you write for the dragonfly? (map 5).

The most common name of the dragonfly in the Hsüan-hua area is [³swe ¹tɕæt] (see the black triangles on the map) in 36 villages. Next comes the form [³swe tɕɪð] (white triangles) in 9 villages. Now these names are easy to analyze, because of the tone of the first element which is understood as "water", in Peking 水 shui³; these names mean the [tɕæt] or [tɕʊð] of the water, or rater *over* the water, the place where the dragonflies hover in summer and where the boys gather to catch them. If we know characters, we would hesitate only a short time before writing the second element of this word 蜻, which in Peking is ¹ch'ing; the presence of this "aspiration" may cause this hesitation, but we would be confirmed in our choice of the character 蜻 by the discovery that in two villages of our area (Cz 315b and Cz 317) an "aspirated" form is in use: [swe tşæt] and [swe tşʊ] respectively; here we have without doubt the very word represented by 螭 in the written language.

Having read so far, we may stop a moment to compare the use of the [-œ+] suffix with the examples seen in an earlier chapter. In the case of the dragonfly too, the presence of [-œ+] does not seem to be regulated by a strict rule; forms without the suffix crop up in haphazard way, as may he seen on the map.

A further remark about the [-œł] forms. It is well known that in Peking, a 兒 added to a syllable ending in [-ŋ], keeps the nasalization with the retroflex vowel. In Hsüan-hua we found this only in four villages: Cz 320, 355, Dv 126, 127d. In the great majority there was no nasalization left with the retroflex; this was after all to be expected when one remembers what was said above about the tendency of these dialects to pronounce hardly ever a final nasal consonant.

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We now come to the most interesting feature of this map. Six localities gave us a labialized pronunciation: ['tequet]: Cz 270, 278, 310, 311b ([teyt]!),

351 ([tgy1]!), Dv 83, all in the approximate area of the Wan-ch'üan-Kalgan influence.

Phonetically speaking, it will not be temerary to see here the result of the labial [œ] and the retroflex [‡], combining their influence to bring a front rounded glide [ų], or even in two cases, a front rounded vowel [y].

However, looking at it from the point of view of the dialectal speaker, this change brings the second element of the dragonfly names into a new category where it is alligning Itself with words, romanized either chüan, like Pekinese 捲 ³chüan and 圈 ⁴chüan, or if one likes, with words as chü, like Pekinese 橋 ²chü and 鋸 ⁴chü. Of course these are examples which are purely hypothetical parallels, as these words may not exist with an [-œɨ] form around Hsüan-hua (no check was done on this point). What I wish to say is: if you should try to make a dialect speaker tell you the word [swe tœēi] without suffix, he may wind up saying [swe tæīi]; but in these six western villages where they say [swe tɛquei], the speaker will say either [tɛqɛ] or [tɛq].

To put it yet more tersely: let's stop interpreting dialects in terms of written characters, because they do not represent the same line of evolution. In the Romance languages, the Walloon dialects cannot be interpreted in terms of Paris language, as they represent something quite different, namely how Latin (and not French) came to be spoken in Walloon villages. This will be still more evident in next chapter.

Chapter 6: The birth of a 入聲 fifth tone: the bat.

The tone categories of historical Chinese are four in number; the last one, by its historical name, 大聲 ju-sheng, having disappeared in modern Pekinese, one often hears it called the fifth tone, meaning the extra tone that is not among the four tones of modern Pekinese.

Now as a good historical definition of what this fifth tone is, let's quote Professor Chao in his "Introduction to pronunciation", (American edition of Matthews, Dictionary, "Words in this tone are derived from those ending in -p, -t, -k in Ancient Chinese, and are now pronounced with a short vowel, ending in a glottal stop when it is at the end of a phrase as in Nanking, or simply form a separate tone class without being either short or ending in a glottal stop as in Changsha." These words have of course kept their implosive -p, -t, -k finals in many Southern dialects. One has read the description of this fifth tone in Hsüan-hua in the beginning of this study.

The definition given above is historical, meaning that the two following facts are put into relation:

1° the linguist ascertains that a spoken dialect makes a phonological opposition between 3 or 4 or 5 groups of words, only because of their differences in musical tones;

2° the same linguist finds that from early times Chinese poets, and later, Chinese scholars have classified the words of the written language in four groups according to their differences in musical tones.

It seems undoubtedly his full right to make up genealogical lists, showing how the ancient tone-groups are represented by the modern spoken classes; when more than four classes exist, a phonetic rule may be found to explain how some words switched from one class to the other. Everybody concedes the right to a particular dialect to have a few exceptions, like the Tatung rural area which uses [4mu: txew] "wood, wooden"; [4mu:] is a low rising, long tone, although 木 ought to be a fifth tone, like "bone" [ku ɔ̃¹txew], 骨 is a fifth tone. One will say then that 骨 has kept its fifth tone, but that 木 switched to a fourth tone, either as a loan word, or through the influence of initial m-, or any other reason you may discover.

This is not meant as ironically as it sounds, because it is a fact that each tone-category, because it forms a large group, existing in opposition to another group, is less apt to allow each member of the group to go its own way; vowels and consonants, although they too form groups, are more liable to become the victims of popular etymology, assimilation, and so on.

* *

To teach us prudence in our historical judgment, here now come the Hsüan-hua dialects which give birth to a fifth tone, which no rhyme dictionary ever knew, and of which the parents are still among us. (map 6).

The bat is called in the villages of our area: [4js³pjs³xwœf]. As a subsidiary problem, we may note that the last element is found either as [xwœf] or as [xuf]; a vertical line through the circles and the diamonds on the map shows the presence of the latter form; such an alternation is not possible in Peking where [xuf] is xu+œf but [xwœf] is xun+œf.

Peking has ¹pien-²fu for the bat, written 蝙蝠. [xu] instead of [fu] is not limited to Hsüan-hua. J. Mullie found it in some parts of 熱河 Jehol province, and I found it in Tatung, North Shansi. But there is in all these dialects

an added determining word; in Jehol it is pronounced yen, in Chahar (among the Chinese colonists north of the Great Wall) it is [js]; in both regions, this word is understood as "salt"; a local belief asserts that rats who have eaten from the salted vegetables (鹽菜 yen-ts'ai) stored in the kitchen, change into bats at night.

However in Tatung and here in Hsüan-hua, [js] is understood as "night", because bats fly at night.

* *

Looking now at map 6, we see the name [js pjs xwœt] in 25 villages (circles), covering the greatest part of the Hsüan-hua area, except in the southeast where two villages only have it. The element [js] has the stress and is long, low rising.

The other forms represented by diamonds on the map, show 3 varieties of the same name; all have in common an unstressed central syllable, with a weakened vowel:

- 13 villages have [-pjž] (empty diamonds)
- 2 villages have [-pjš-] (half black diamonds)
- 9 villages have [-pjă] (black diamonds)

These varieties are all present in every one of the three linguistic islands represented by these diamonds (in addition, Dv 126 is a single isolated case) and they represent clearly different stages in a moving situation.

We can say at once that the first one [pjĕ], although the most numerous now, has the least chance of persisting, because it does not enter easily in the phonetic system of these dialects. In this area, the following oppositions exist:

[pjs] (1-th tone "side", 4-th tone "to change") corresponds or is opposed to [pjǎ] (5-th tone, like [pjǎ də xwɔ] "sad", or [jǔ pjǎ] "one hundred". In Peking the first groupe is: pien (邊 or 變), the second group is "pieh" (憨) and "pai" (百).

In Hsüan-hua there is no room for a form like [pjě], although this represents the necessary phonetic transition to [pjě]; this latter now will find its natural place among the fifth-tone words. What is the fifth tone here? An unstressed syllable with an abrupt tone, and a medial or modified vowel. This definition is clearly fitting in the case of [pjě] "hundred", of [pjě] "sad", of [pjě], the central syllable of the name of the bat.

For one looking at the dialects from the point of view of the written characters, no repugnance is felt in acknowledging that Pekinese "hundred" pai and "sad" pieh, may have the same fifth tone pronunciation in the Hsüan-hua area; both words are found in the fifth tone column of the ancient rhyme books, and just happens to have followed divergent ways in Peking. But it must go against the grain to call a syllable like "pien" of Peking a fifth tone in Hsüan-hua. Somebody ought to go to these villages and tell the peasants to change their ways.

* *

Such a fact is very important of course for the methodology of dialectal surveys. Let nobody be tempted to show to the peasants of Hsüan-hua a questionnaire with a list of characters like the one published in July 1955 in Peking: 方言調查字表 by the 中國科學院語言研究所, which on page 44 lists, nicely arranged according to categories of initials, finals and tone, the following characters: 編, 篇, 偏, 騙. How could anybody in Hsüan-hua hesitate and not read all this [pjs]? Would that be Hsüan-hua dialect?

There is also the still more recent questionnaire, of August 1956, 漢語方言調查簡表 by 丁聲樹 and 李榮 which on page 26 lists likewise: 編, 扁, 匾, 編, 篇, 偏. Undoubtedly this also would be read [pje] by a Hsüan-hua peasant, if he happens to be able to read characters. The very fact that such a questionnaire can only be used by people who read, gives a distorted picture of the linguistic reality. This is not dialectology. Maybe we have here the reason why surveys conducted by this method have failed till now to produce the kind of revolutionary discoveries in China, which have been the fruit of dialectal research in the Romance and Germanic languages.

I have noted earlier that the Tatung dialects know two "animals" with similar names: [js pjs fœł] (the bat) and [ma pjs fœł] (the ant). Now this ant's name, a little further west than Tatung, in the 朔縣 Shuo hsien prefecture is pronounced [ma pjǐf œł], with a fifth tone in the central syllable. This is evidently the same phenomenon as the one discovered on our map of Hsüan-hua: the element [pjs] jumped categories and "became" a fith tone. I could ask here: "shall we write the Shuo-hsien [pjǐ] also with the character 蠣, or shall we choose 蝠? there happens to be a graphically related 逼 pronounced "pi" in Peking!

How to write the [pji] element in the name of either the bat or the ant is not a new problem; it has cropped up in the course of the whole history of written Chinese. In the 聯縣字典 dictionary of 符定一 Fu Ting-i (Peking, 1941–1943), vol. 8, page 申 184, we find the 爾雅, the 方言 and the 禮記 using the combination 蚍蜉 pi-fu for "large kind of ant".

Evidently this fact was known to the writers of the Academy of Sciences questionnaire; in the lexical worksheet (方言調査司彙手冊) of october 1955, page 15, they list "the ant", first with its Peking name 螞蟻 ma-i, then they suggest a variant reading 蚍蜉 pi-fu. The second questionnaire of MM. Ting and Li has the two same characters on p. 47.

Of course the use of such characters is nothing but an easy trick to express the sound, although they present the great danger of letting non-trained readers think that 蝙 and 妣 represent two different words, two separate lines of linguistic evolution. The analysis of our map 6 proves conclusively that these two words are but one. It may be a warning also to the linguists; the living dialects create incessantly new forms for which no "reconstruction of Ancient Chinese" can account.

A last word about the map: the dispersion of the [-pjĕ -], [-pjĕ -], [-pjĕ -] forms in three seperate islands shows that we have here unrelated areas; the dialects all over this region have reached a state of change where the next step of the phonetic evolution is predictable, and happens at different spots at the same time. The newer forms will undoutedly spread further. The map illustrates the way by which a "phonetic law" works in reality.

Chapter 7: Creation and invention of new words: the woodpecker, the lizard, the grasshopper.

Dialectal words for flowers, insects and birds are everywhere the privileged realm where linguistic creations occur with the greatest variety. This is partly due to the more frequent use of such words by the younger generation of speakers, who have the liveliest imagination and the greatest instability in their fads. But here plays also an element which we may call "non-arbitariness". Because these living beings are apt to be personified, their names describe, they explain; they are not solely arbitrary linguistic signs, like "cow" or "horse". There is thus a constant urge to improve upon the existing names and to counteract the ever recurring abrasion by usage.

1. The woodpecker (map 7).

This bird is called cho⁴ mu⁴ niao³ 啄木鳥 in Peking. The morphology of this name is clear: a verb (cho⁴) followed by its complement (mu⁴), "he pecks the trees", and the whole is used as a determinative of the noun bird (niao³): "the bird that pecks the trees."

This morphological type exists in the villages around Hsüan-hua; see the black diamonds on the map standing for the name [\$p@ 4su 1tsxwe zə]. The phrase is: "he adzes" [\$p@] "the trees" [4su], and it is affixed to the noun "hammer" [1tsxwe zə]: "the hammer that adzes the trees". This name occupies a central zone extending from east to west. As a derived variety (the rectangles of the map) the left corner of the first zone is occupied by a name of identical formation, but the verb used is [\$p@] "to strike"; [\$p@ 4fu 1tsxwe zə] means then: "the hammer that strikes the trees". Note that here "tree" is [4fu], not [4su] like in the first name. There is an instability of usage in many words beginning with [f.]

Historically speaking, these two related names seem of recent date (in this area, of course). They have cut across the territory of an older name which is now used in the hinterland of the two cities, Kalgan in the north and Hsüan-hua in the south (see the circles on the map). This name is built differently: a verb "he adzes" has a complement "the worms", but the latter is preceded by a determinative "of the trees." [*p@4*su 1*tsxwon zə]: (the bird) that adzes the worms of the trees. That this name is older in this region, the very shape of its two territories proves it; but there are also two phenomena of interior attrition, pointing to a growing weakness.

- a) Cz 311 has [pā ʃu tsxwōə zə] "it strikes the worms of the trees" in which [pā] is borrowed from the [pā ʃu tsxwe zə] names; we used on the map a half-circle with a half-rectangle. The presence of this hybrid as far north makes it probable that the [pā]-names must be in use in the (unexplored) westerly direction.
- b) The greatest part of the south-east has not [pe su tsxwovzə] but an reduplicative alliteration in which the meaning of the component parts is nearly lost: [³pe⁴pe¹tsxwovzə]; "it tick-ticks the worms" would be a good rendering. This corrupted form is clearly popular in that part of the map which is influenced by the easterly market town 趙川堡 and the roads leading there.

This the third time that names with a reduplicated element crop up in this study: the magpie has a name around Kalgan with the last syllable repeated: [çi tça tça] (see chap. 3) and the tadpole, in the same area has the name [kə tow tow]. Professor Li Fang-kui has made the remark somewhere that nouns are only reduplicated when they refer to human beings, specially to those whom we respect, like parents. This was said of the standard Pekinese, but applies to many of the North Chinese dialects as well; moreover we find in the dialects the extension of this use to names of insects or birds, precisely to convey a sense of intimacy with personified beings.

2. The lizard. (map 8).

In the north, four villages in the immediate approaches of Kalgan have for the lizard the name [¹tʃxœ ³sœt] (black triangles on the map). As far as this name is analyzed by the speakers, it means "the snake" [sœt] found "in the ruts" of the road, where the lizards are often seen running in the summer.

The greatest part of the explored area has another, puzzling name: [¹ʃœ³ mǎ ³sœ¹]. First of all I want to explain that where the legend of the map has the indication "....[si zə] it means that all names of the lizard fluctuate between the suffixes [-sœ¹] and [-si zə]"; [-ʃœ¹] is also found instead of [-sœ¹]. It is precisely in a village where the lizard is called [ʃœ³ mě ʃœ¹] that one speaker volunteerd an explanation:" it is like a snake, but it is not a real snake, so we call it [ʃœ³ mẽ ʃœ¹]", in written language 蛇沒蛇兒. This shows how the speakers' mind works.

Among my notes taken during the Tatung survey I find for the lizard: [[] må tsxœ1] in the eastern part, and [[] må dzœ1] in the west; these names are clearly of the same type as the Hsüan-hua [[]œ9 mð []œ1]. Their relationship eacapes me.

Less than 100 miles in a northwesternly direction from Hsüan-hua, outside the Great Wall, R. Léva found a name for the lizard which he wrote (in French type of romanization): *cheue-seu-ze*, with characters supplied by the local speakers showing their explanation of the name: 蛇獅子 "the snake-lion". Regardless of this interpretation, the phonetic structure of this name points to a relationship with the names quoted above.

If we cannot explain satisfactorily the meaning of the Hsüan-hua names for the lizard, at least our map shows how two dialectal names interact in a small area to give birth to new names.

a) First in the boundary name between $[t]xce^9$ seel and $[ce^9$ mã seel not less than ten villages have a mixture of these two; it is the first name, into which the [-mã-] of the second name has been inserted (see the circles with the white triangles at Cz 307, 307a, 309, 311b, 315b, 315c, 316, Dv 83a, 95, 98).

Of course this linguistic change did not take place with the people deciding to borrow a part of the two different names to construct a new one. What really happend may be reconstructed in the following way. The $[t]xce^3$ scel] names were formerly not limited to the four villages south of Kalgan (the black triangles), but covered a larger territory, reaching at least to the horizontal line marked 40°42'. From the south, under the influence of the county seat Hsüan-hua, another name started to travel northwards along the main roads (see the roads on map 10) and because it was thought "fashionable", this name simply supplanted the former one. But in about ten villages, the initial [t]x-[t] of the ancient name was deeply enough rooted in the linguistic consciousness, to be felt as a necessary prerequisite of the name "lizard"; it was retained to replace the [t]-[t] initial of the new form. That is the only natural way to reconstruct the phases of such a lexical change; therefore the [t]x-[t] initials of the mixed forms are indirect witnesses of an earlier large area with $[t]xce^3$ scel[t] forms.

A basic condition must be fulfilled before such a change could take place: the names of the lizard must have linguistically become completely arbitrary signs. The component syllables are no longer clearly understood (an opposite example are the names of the woodpecker), and there is no resistance from a conscious analysis of the signification. To put it very simply: except for the speaker who volunteered his "etymology", the people now do not think about "snake" when they call the lizard [$\int ce^{2} m \, ds$ set]; therefore they do not mind so much starting to say [$t \, \int x ce^{2} m \, ds$ set].

b) Once a name is torn from its idea association, any fantastic tie-up is possible. We have now in the case of the lizard, four villages (the circles with back triangles, where the no longer understood $[t]xce^{3}$ goes its own way and meets the names of the...grasshopper. Here is a list showing how the names were attracted by each other:

| Village | dimos bas afron lizard as 351 ,501 ,600 | grasshopper |
|---------|---|-------------|
| Cz 315a | gasta aluma pam teja mə sœl | tejow mə zə |
| Cz 315b | tsjow må si zə | tejow má zə |

Cz 315c tejow mje sceł tejow mă za Dv 83 teje me si za tejow mał

An important fact must be noted: from Cz 307 to Cz 355, and at Dv 83 and 83a, all the villages have the same [toow mə zə] type of name for the grasshopper. It is therefore a largely known name, and the lizard name entered its orbit of attraction when the first syllable started to change.

3. The grasshopper

The names of the grasshopper could have produced most interesting maps if we had not discovered too late that our questionnaire was incomplete. In the first third of our trip, we only asked about the large green grasshopper and the small brown variety. We found after a while that a third kind, a small green one, was very wellknown too, especially because of its knife-like tail, which is the distinctive mark of the females. There was no way of retracing our steps to check; we only knew that out of the three popular insects, we had only 2 names, but nothing to help us decide which of the three had been meant in each village. I am nevertheless in the position to give two striking examples of the linguistic creativeness found in the names of the large green grasshopper.

a) See the names listed in the last paragraph of the lizard names. These names and all the similar types of the same area fluctuate between two kind of associations of ideas.

One is: the grasshopper is called the "calling" [tgjow] "hopper" [mǎ zə]. A local belief takes the cry of the crane as a sign that the millet is ripe, while the song of the hopper tells the peasant that the wheat is ripe; [tgjow ma zə] has therefore a tendency to shift to [tgjo mjǎ zə], in which [mjǎ zə] is wheat.

Another is: the poorest soil in the Hsüan-hua region is now used for buckwheat which is called [t_{\S} jow mjǎ z_{Θ}]. The grasshopper instead of announcing the wheat, is called itself in some villages "the buckwheat."

Hence in all the names of that type, an infinite variety of fluctuations between [$t \in jow$] and [$t \in jow$], between [$m \check{a} z \ni$] and [$m \check{j} \check{a} z \ni$]; no wonder that some of these names started to attract some of the lizard names which were similar.

b) The grasshopper has a strange name in the villages from Dv 122a to 138, also 163, 163a, 164a, 167 and 171, north and south of the city of Hsüan-hua: [vã to: sə] which means "The Taoist monk Wang". We cannot trace its origin with our material only, although we suspect an association

of idea with tao (a knife) somewhere in a neighboring area, where then the family name Wang was added to "clarify" the dialect name.

But anyway one looks at it, there is now a name of a monk. From then on, the creative imagination of the speakers runs free, and coming to the extreme southern and eastern corners of the territory (localities Dv 139, 139a, 164b, 170a, 138b), the surname of the monk is changed into Chang 張 [dzã to: sī] "the Taoist monk Chang".

CONCLUSION (Synthesis of the Results)

The analysis and the comparison of these few dialectal maps have given us a glimpse into the laboratory of the living language; or shall we rather call it a factory, because the most striking fact is the creative activity which pulses everywhere under the surface.

The tones (map 6), the vowels (map 5), the consonants (maps 3 and 4), the morphology (map 1), the meanings (maps 7 and 8), all emerge changed from the crucible of the linguistic usage and of the geographical contacts.

We may go now a step further and try to show a common factor at work in the Hsüan-hua dialects. On map 9 we have traced the dialectal boundaries discovered on the other maps. The figures 1, 2, 3, 4, 5, 7 and 8 refer to the maps described above. There are also four boundaries with a capital letter, A, B, C, D. A is the boundary between [sa sa] (in the NW) and [dzī sa] (SE), names of the grey centipede. B is the boundary of the names of the tadpole, see chapter 3. C is the boundary between [ʃ@] (NW) and [ʃwã] (SE), the interrogative word "What?", in Peking shih-ma 什麼. D is the boundary of the magpie names, see chapter 3.

All these isoglosses bundle together in two places; three lines (3, 4, 7) in the southeast corner, and all the the others halfway in the northwest of the region. I wish here to draw the attention to the folklore investigation done in the same area in 1948. The results have been published in Folklore Studies, Tokyo, vol. X, 1951, pages 1–116, 72 photographs, 8 maps.

We reproduce here on our map 10 two sketches published at that time. They were made in the following way. The sketch at the left (see N) is a summary of 6 distinct folkloristic boundaries; to give one example, all the 12 instances of temples of 觀音 Kuan-yin in the blackened area are built on a high tower, whereas in the south of it, 44 of such temples are ordinary

low temples. The common area covered at least by 4 out of 6 of these religious features, extends as a black belt in the north, showing the influence of the city of Kalgan in the northwest and of the city of 常岭口 Ch'ang-yü-k'ou (not on the map) in the northeastern corner of the area. Both these cities are outlets towards Mongolia of the old Imperial highways.

Let us now look at the righthand sketch (see E) of map 10. This also is a synthesis of four more folkloristic maps; the common area covered by at least 3 out of 4 of the religious features is shown as a blackened area in the east; for details see the study quoted above, but here too we may give one example. In the black area, all the 31 temples of the local god of the soil have the image of 山神, god of the mountains, in the central position on the altar, whereas in the western half of the area, this place is taken by the 五道 Wu-tao god, in 57 temples. In this case, to the influence of the road coming from the northeast is added that of the road from 趙川 Chao-ch'uan, outside the map to the east.

These dispersion areas shaped by the local religious cults show striking similarities with the areas shaped by the linguistic boundaries on map 9. There too a small wedge in the southeast betrays the influence of Chao-ch'uan, whereas the eight lines in the northwest prescribe the limits of the influence of the city of Kalgan, Cz 276.

Putting now map 9 and 10 side by side, we are struck by the isolated position of the prefectural city of Hsüan-hua, Dv 128. As the oldest cultural and political center of this area, it has kept its surrounding countryside under its influence. We may call this central area the "Kernlandschaft" (the core area) by the name used in German dialectology. Our maps 9 and 10 show also how very small this central core is and how quickly it goes over by gradual shadings into the neighboring spheres of influence.

Although very limited in its scope and in its area, this linguistic survey has revealed some of the forces at work in the Chinese dialects, it has shown the contour of the Chinese linguistic landscape, finally it has proved the urgent necessity of detailed dialectal investigations.











