

NOTE ON THE DEFINITIONS OF PLACE OF RESIDENCE
USED IN THE 1990 POPULATION CENSUS OF CHINA

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Two methods of classifying persons as residents of cities, towns, or counties are used in China's 1990 population census. The first method stipulates a more inclusive definition of city residents and a less inclusive definition of county residents. The second method second stipulates a less inclusive definition of city residents and a more inclusive definition of county residents. No such simple characterization of the difference in the groups classified as town residents under the two definitions is possible.

The precise relationship between city, town and county residents under the two definitions is complex and requires more detailed statement. The purpose of these notes is to provide such a statement, to raise a number of questions about the definition of the two methods given in the census documentation, and to make the definitions more understandable.

The definitions are stated in terms of the administrative hierarchy and the way this is encoded on census records. Every person enumerated in the census was assigned an 18 digit code, the composition of which is shown in Display 1.

In addition to the various kinds of units shown in Display 1 there may be codes for something referred to as *kongque* at various levels. This corresponds roughly, but only very roughly, to "not applicable." A detailed discussion of these *kongque* codes is beyond the scope of the present version of these notes, though we hope to address it in a subsequent version.

Display 2 shows hierarchical relationships between these various units. We see, for example, that there are districts (*qu*) under prefectural level cities (*dijishi*), but not under prefectures (*diqu*), that districts (*qu*) are of two kinds, urban districts (*shiqu*) and periurban districts (*jiaoqu*), and that urban districts are composed of street districts (*jiedao*) only, whereas peri-urban districts are composed of street districts, towns (*zhen*) and townships (*xiang*). The essential point here is that not every type of unit at a given level can occur within every type at the next higher level.

The *qu-jiaoqu* distinction has broken down, and so should no longer be used. With this exception, the hierarchical

relationships shown in Display 2 apply to the 1990 census data.

Display 3 shows definitions of various residence classifications used in defining city, town and county residents. The definitions themselves are shown in Display 4, which with the noted exceptions correcting typographical errors is precisely what is shown in the census documentation.

The definitions in Displays 3 and 4 involve the codes used to represent different kinds of units at different levels, and there is one peculiarity in the coding scheme for county level units that requires explanation. Within prefectures (*diqu*), county level cities (*xianjishi*) are coded 01-20 and counties (*xian*) are coded 21-97. In prefectural level cities (*dijishi*), however, the county level codes 01-20 are used for districts (*qu*), and county level cities are assigned county level codes in the range of 80-97. Thus the meaning of a county level code depends on the prefectural level code associated with it.

The definitions in Display 4 are read from left to right. The occurrence of a given subscripted letter in any horizontal position indicates that a person must be in the set designated by this letter to be included in the residence category being defined. Vertical stacks of subscripted letters indicate that a person may be in any of the sets designated. The addition sign "+" indicates adding a group of persons, the subtraction sign "-" taking away a group.

Because the sets A_1 and A_2 together comprise the entire population, the notation

$$\begin{matrix} A_1 \\ A_2 \end{matrix}$$

that appears in several places is strictly speaking superfluous, for since every person is either in A_1 or in A_2 , the notation has no effect on the set of persons defined by the expression in which it occurs.

There is in fact only one instance in which A_1 or A_2 do not occur in vertical combination, and this is in the left hand term of the expression defining city residents according to Method 1, the topmost expression in Display 4. In this case, however, the expression containing A_1 also contains the expression

$$\begin{matrix} B_1 \\ B_4 \end{matrix}$$

As it turns out, however, this renders the A_1 term superfluous here as well, for the following reasons. The omission of A_2 here excludes persons living in prefectures (*diqu*), but such persons are excluded by the occurrence of B_1 and B_2 . B_1 requires that a person live in a district (*qu*), and there are no districts in prefectures, whence a person in B_1 must also be in A_1 . B_4 requires that a person live in a county level *kongque*. There are only six county level units coded *kongque* in the 1990 census, and all of them were contained in prefectural level cities. (The counties were 210798, in Liaoning; 371198 in Shandong; 441998 and 442098 in Guangdong; and 460198 and 460298 in Hainan.) A person in B_4 is thus necessarily in A_1 also.

In the end, then, all the occurrences of A_1 and A_2 in the definitions of Display 4 are superfluous and may be omitted. To know that this is the case, however, requires knowing both the hierarchical structure in Display 2 and the fact that all county level *kongque* in the 1990 census are in prefectural level cities. The latter fact is not mentioned in the official census documentation in connection with the definitions of residence type.

To clarify the definitions in Display 4 we make the implicit set-theoretic operations explicit by the tabular displays in Displays 5 and 6. These displays may be read either as tables showing the classification of population by B-level and C-level residence categories, with a single D-level division within C_3 , or as Venn diagrams representing various subgroups of the population.

The diagrams are generated by direct reference to the definitions in Display 4. Each cell in the display represents a set of persons. The notation in the cell shows how these persons are classified under the definitions, as city, town or county residents. Notations in cells whose classification is different under the two methods are bolded for ready identification between the two diagrams.

Careful inspection of Displays 5 and 6 shows that they may be substantially simplified by collapsing and re-ordering categories, as shown in Display 7. Display 7 shows at a glance both the two methods of defining residence group and the relation between the two definitions. In this way we arrive at the following characterizations of the two methods, which are identical to but far more readily comprehensible than those shown in Display 4.

Working from the simplified schematic diagram we arrive at the following residence type definitions.

Method 1

(1.1) CITY residents are all persons living in districts (*qu*, coded B₁), all persons living in county level cities (*xianjishi*, coded B₃), and all persons living in county level *kongque* (*xianji kongque*, coded B₄).

(1.2) TOWN residents include all persons living in officially designated towns (*pizhun de zhen*, coded C₃) under counties (*xian*, coded B₂). This definition of town residents excludes persons living in officially designated towns in peri-urban districts (*jiaoqu*, coded B₁ along with *shiqu*) and county level cities (*xianjishi*, coded B₃); both of these groups are counted as CITY residents by the first method.

(1.3) COUNTY residents are all persons not classified as CITY or TOWN. Equivalently, COUNTY residents are all persons living in counties (*xian*, coded B₂) who do not live in officially designated towns (*pizhun de zhen*, coded C₃).

This first method results in classifying as city residents a substantial proportion of persons living in what would generally be considered rural areas. The second method represents an attempt to refine the first method by removing certain persons from city residence and moving them to town or county residence.

Method 2

(2.1) CITY residents again include all persons living in districts (*qu*, coded B₁), all persons living in county level *kongque* (*xianji kongque*, coded B₄), and persons living in street committees (*jiedao*, coded C₁ or C₂), collective households (*tedajitihu*, coded C₇ and C₈), or township level *kongque* (coded C₉) in county level cities (*xianjishi*, coded B₃).

Equivalently, the second method defines as city residents those persons defined as city residents by the first method less residents of county level cities (*xianjishi*, coded B₃) who also reside in (1) officially designated towns (*pizhun de zhen*, coded C₃), (2) towns not officially designated (*weipizhun de zhen*, coded C_{3'}), or (3) counties (*xiang*, coded C₄, C₅, or C₆).

(2.3) TOWN residents are persons living in neighborhood committees (*juweihui*, coded D₁) of officially designated towns (*pizhun de zhen*, coded C₃) under counties (*xian*, coded B₂ or county level cities (*xianjishi*, coded B₃).

(2.3) COUNTY residents are again, and of necessity, all

persons not classified as city or town residents. Equivalently, COUNTY residents consist of (1) persons living in counties (*xian*, coded B₂) but not in neighborhood committees (*juweihui*, coded D₁) of officially designated towns (*pizhun de zhen*, coded C₃) and (2) persons living in county level cities (*xianjishi*, coded B₃) and also in village committees or village level *kongque* (*cunweihui*, coded D₂ and D₄, respectively) of officially designated towns, in towns not officially designated (*weipizhun de zhen*, coded C₃'), or in townships (*xiang*, coded C₄, C₅ or C₆).

Display 1
Scheme of Area Codes Used in China's 1990 Census of Population

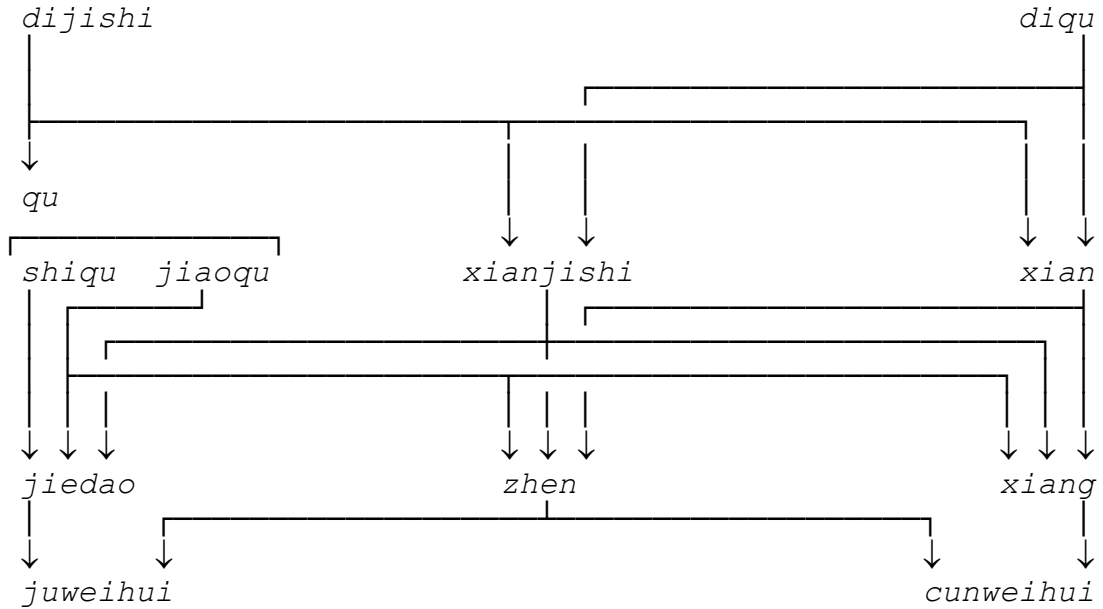
<u>Level</u>	<u>Name(s)</u>
(1)	National Level
(2)	Provincial Level <i>sheng/zhixiashi/zizhiqu</i> province/provincial level city/autonomous region 2 digit code
(3)	Prefectural Level <i>diqu/dijishi</i> prefecture/prefectural level city 2 digit code
(4)	County Level <i>xian/xianjishi/qu</i> county/county level city/district 2 digit code
(5)	Township Level <i>jiedao/zhen/xiang/taojitihu</i> street committee/town/township/large collective household 3 digit code
(6)	Village Level <i>juweihui/cunweihui</i> neighborhood committee/village committee 2 digit code
(7)	Enumeration District 2 digit code
(8)	Household 3 digit code
(9)	Person 2 digit code

The first 18 positions (2+2+2+3+2+2+3+2) of the computer record for each person give these codes in this order. Enumeration districts, households, and persons are assigned purely formal, serial

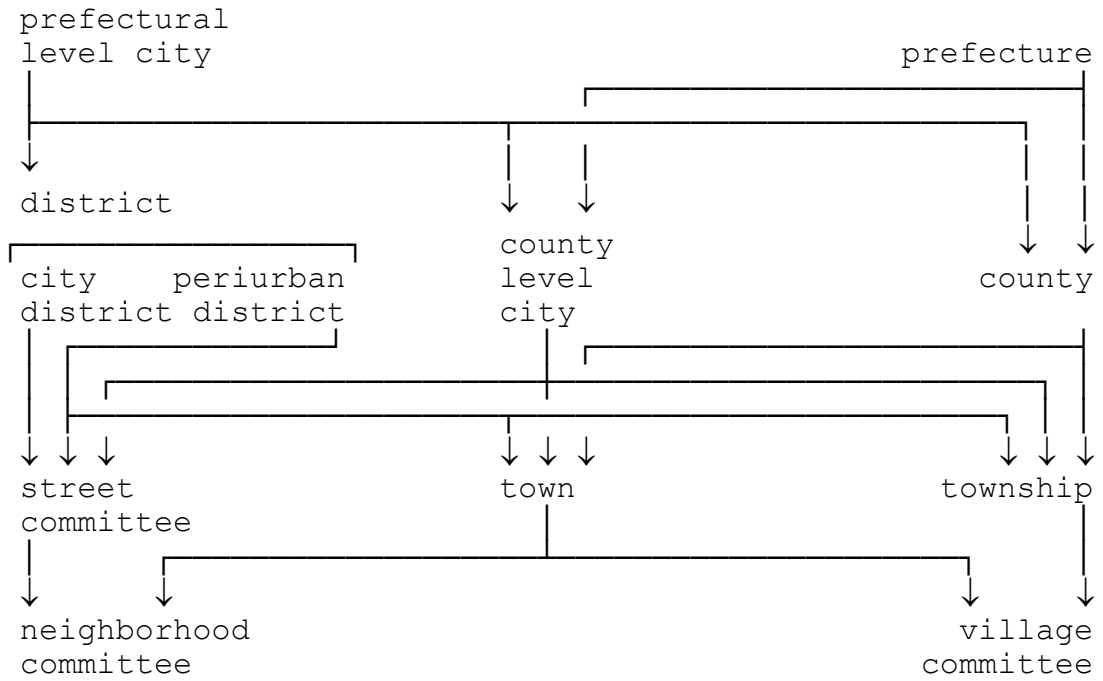
codes.

Display 2
Diagram Illustrating Types of Units in the Administrative Hierarchy
at the County Level and Below as of China's 1990 Census of Population

Pinyin



English Translation



Display 3
Definition of Population Subgroups Used in Defining City, Town and County Residence
in China's 1990 Population Census

dījímā/prefectural level code

A₁: *dìjīshì*/prefectural level city (PLC=01-20)

A₂: *dìqū*/prefecture (PLC=21-90)

xiànjímā/county level code

B₁: *qū*/district (CLC=01-18)

B₂: *xiàn*/county (CLC=21-77)

B₃: *xianjishi*/county level city (PLC=21-98 and CLC=01-20) or
(PLC=01-20 and CLC=80-97)

B₄: *kongque* (CLC=98)

xiangjímā/township level code

C₁: *shìqū jiedaò*/urban district street committee (001-097)

C₂: *jiaoqu jiedaò*/peri-urban district street committee (200-297)

C₃: *pizhun de zhèn*/officially designated town (400-447)

C₃': *weipizhun de zhèn*/unofficially designated town (450-497)

C₄: *shìqū xiang*/urban district townships (100-197)

C₅: *jiaoqu xiang*/peri-urban district townships (300-397)

C₆: *xiànshù xiang*/townships under counties (500-897)

C₇: *tèdàjītíhù shìrénkōu*/collective household in city (900-947)

C₈: *tèdàjītíhù xiànrénkōu*/collective household in county (950-987)

C₉: *kongque* (998)

chuanjímā/village level code

D₁: *zhènshù juwēihùi*/neighborhood committee under town (01-47)

D₂: *zhènshù cunwēihùi*/village committee under town (50-97)

D₃: *qíta*/other (01-98)

jiedaò banshìchù xià shù de juwēihùi (01-97)

neighborhood committee under street committee office

xiang yī xià de cunwēihùi (01-97)

village committee under the township

kongque (98)

D₄: *zhèn shu kongque* (98)

Display 4
Operational Definitions of Classification of Population by City, Town and County
Residence: Methods 1 and 2

Method 1

$$\text{City} = \begin{matrix} & & C_1 \\ & & C_2 \\ A_1 & B_1 & C_3 \\ & B_4 & C'_3 \\ & & C_4 \\ & & C_5 \\ & & C_7 \\ & & C_9 \end{matrix} + \begin{matrix} & & C_1 \\ & & C_2 \\ A_1 & B_3 & C_3 \\ A_2 & & C'_3 \\ & & C_4 \\ & & C_5 \\ & & C_7 \\ & & C_9 \end{matrix}$$

$$\text{Town} = \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_2 \\ C_3 \end{matrix}$$

$$\text{County} = \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_2 \\ C'_3 \\ C_6 \\ C_8 \\ C_9 \end{matrix}$$

Method 2

$$\text{City} = [\text{Method 1}] - \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_3 \\ C_3 \\ C'_3 \\ C_4 \\ C_5 \end{matrix}$$

$$\text{Town} = \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_2 \\ C_3 \\ D_1 \end{matrix} + \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_3 \\ C_3 \\ D_1 \end{matrix}$$

$$\text{County} = [\text{Method 1}] - \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_2 \\ C_3 \end{matrix} + \begin{matrix} D_2 \\ D_4 \end{matrix} \begin{matrix} A_1 \\ A_2 \end{matrix} \begin{matrix} B_3 \\ C_3 \\ C_4 \\ C_5 \\ C'_3 \end{matrix} \begin{matrix} D_2 \\ D_4 \end{matrix}$$

Source: Documentation of China's 1990 census of population.

Display 5
Schematic Diagram of Definition of City, Town, and County Residence
Method 1

METHOD 1		A1: <i>dijishi</i>		A2: <i>diqu</i>	
		B1 <i>qu</i>	B2 <i>xian</i>	B3 <i>XJS</i>	B4 <i>KQ</i>
<i>C1 shiqu, jiedao</i>		CITY		CITY	
<i>C2 jiaoqu, jiedao</i>					
<i>C3 pizhun de zhen</i>	D1 <i>JWH</i>		TOWN	CITY	
	D2,D4 <i>CWH</i>		TOWN	CITY	
<i>C3' weipizhun de zhen</i>			COUNTY		
<i>C4 shiqu xiang</i>					
<i>C5 jiaoqu xiang</i>					
<i>C6 xianshu xiang</i>			COUNTY		
<i>C7 tedajituhu shi renkou</i>		CITY		CITY	
<i>C8 tedajitihu xian renkou</i>					
<i>C9 kongque</i>		CITY	COUNTY	CITY	

Display 6
Schematic Diagram of Definition of City, Town, and County Residence
Method 2

METHOD 2		A1: <i>dijishi</i>		A2: <i>diqu</i>	
		B1 <i>qu</i>	B2 <i>xian</i>	B3 <i>XJS</i>	B4 <i>KQ</i>
<i>C1 shiqu, jiedao</i>		CITY		CITY	
<i>C2 jiaoqu, jiedao</i>					
<i>C3 pizhun de zhen</i>	D1 <i>JWH</i>		TOWN	TOWN	CITY
	D2,D4 <i>CWH</i>		COUNTY	COUNTY	
<i>C3' weipizhun de zhen</i>			COUNTY		
<i>C4 shiqu xiang</i>				CITY	
<i>C5 jiaoqu xiang</i>					
<i>C6 xianshu xiang</i>			COUNTY		
<i>C7 tedajituhu shi renkou</i>		CITY		CITY	
<i>C8 tedajitihu xian renkou</i>			COUNTY		
<i>C9 kongque</i>		CITY	COUNTY	CITY	

Display 7: Simplified Schematic Diagram of the Definitions of City, Town, and County Residence

METHOD 1	B1:qu	B4:KQ	B3:XJS	B2:xian	
C1,C2 jiedao					
C3 pizhun de zhen	JWH D1	CITY	CITY	TOWN	
	CWH D2,D4		CITY	TOWN	
C3' weipizhun de zhen C4,C5,C6 xiang			CITY	COUNTY	
C7,C8 tedajituhu C9 kongque					

METHOD 2	B1:qu	B4:KQ	B3:XJS	B2:xian	
C1,C2 jiedao	CITY	CITY	CITY		
C3 pizhun de zhen	JWH D1	CITY	TOWN	TOWN	
	CWH D2,D4		COUNTY	COUNTY	
C3' weipizhun de zhen C4,C5,C6 xiang			COUNTY	COUNTY	
C7,C8 tedajituhu					

C9 kongque	CITY	CITY	
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THE FOURTH WHOLE COUNTRY POPULATION CENSUS
REGARDING THE DIVISION STANDARD FOR
CITIES, TOWNS AND COUNTIES FOR POPULATION STATISTICS

(Translation of Census Documentation by Helen Feeney)

In order to make the fourth population census data compiling can reflect our country's current status of city and town population, we will use two methods for hand compiling and machine compiling. The division principle and the address code are as follows:

1: Principles of Division

Method 1:

City Population: The total population enumerated in cities (including towns under the jurisdiction of cities and excluding counties under the jurisdiction of cities)

Town Population: The total population enumerated in towns under the jurisdiction of counties (excluding towns under the jurisdiction of cities)

County Population: The population enumerated in xiàng under the jurisdiction of counties (excluding towns under the jurisdiction of counties)

Method 2:

City Population: Total population enumerated in municipalities [zhíxiáshì--"directly ruled cities"] and díjìshì [see note below] (excluding counties under the jurisdiction of cities [shìxiáxiàn; cities here means either zhixiashi or dijishi]) + the population living in street committees [jiedào "street-road"] of county level cities [xiànjìshì] (excluding the population enumerated in towns [zhèn] and xiang).

Town Population: Population living in neighborhood committees of towns [zhèn] under the jurisdiction of cities under the jurisdiction of counties [xiànjìshì].