

COMPUTER CHARACTER PATTERN FOR TEACHING CHINESE CHARACTER AND A METHOD FOR FORMING THE COMPUTER CHARACTER PATTERN

BACKGROUND OF THE INVENTION

The present invention is related to a computer character pattern for teaching Chinese character and a method for forming the computer character pattern. The adjacent stroke regions or radical section and non-radical section of the character pattern have different grades of pixel values or different profiles. Accordingly, the character pattern is arranged in one single square block to show both the stroke sequence and imitation direction and/or the radical section or code-taking principle of computer Chinese character inputting method.

When learning writing of Chinese characters, it is an important issue to know the stroke sequence and radical of Chinese characters. It is a basic and hardest part of learning Chinese characters to comprehend the stroke sequence and radical of Chinese characters. In handwriting, in the case that the stroke sequence is incorrect, others will be uneasy to identify the Chinese character. The importance of the radical is that the radical helps a learner in learning the structure of the character pattern. Also, the radical will affect the speed by which the learner checks a dictionary.

In conventional stroke sequence teaching method, according to the number of the strokes of the Chinese character, several square

blocks and several characters in the square blocks are used to present the stroke sequence. For example, in the case that the Chinese character totally has fifteen strokes, fifteen square blocks and fifteen characters in the blocks are used on a plane diagram. The strokes of the character in a next block are one more than the strokes of the last foregoing block. This can show the stroke sequence of the Chinese character. In the case that the Chinese character has thirty strokes, it will be necessary to use thirty blocks to show the Chinese character. The thirty blocks will occupy much room of the plane diagram or medium. Moreover, a learner can know the stroke sequence of one Chinese character only after completely seeing thirty characters. Therefore, the learner must be very patient. Also, it is inconvenient for the learner to imitate the Chinese character. With respect to a teacher, there are at least two problems as follows:

1. It is necessary for the teacher to prepare a great amount of diagrams or plane media. Also, it is quite troublesome to publish, compile and typeset the plane media.
2. It is time-consuming to illustrate every characters for the learner to know the stroke sequence. Also, it is difficult to ensure that the learner write the Chinese character in correct stroke sequence. This is because one single Chinese character has too many characters which will occupy too many blocks. As a result, a learner (especially a child) will simply attempt to complete the characters and incautiously

or intentionally neglect the stroke sequence of the Chinese character.

In another conventional method, the stroke sequence of a Chinese character is shown by means of denoting the respective strokes with figures or Arabic numerals. Also, multiple lines and arrows are used to indicate the directions of the strokes. In such method, the lines and arrows will randomly intersect each other. In addition, the numerals will complicate the character pattern. Therefore, it is hard for a learner to see and learn the Chinese character.

In conventional method for judging radicals of Chinese characters, a teacher often first exemplifies a radical and then lists several Chinese characters having this same radical for a learner to memorize or recite. Alternatively, a teacher can one by one point out the radical of a Chinese character for a learner to memorize. In such method, the learning effect is low and the learner is easy to forget the radical after memorized.

A traditional Chinese character is a combinational character composed of elements which are smallest structural units of the Chinese character. For example, 「灣」 is a combinational character composed of five elements of 「シ」, 「言」, 「糸」, 「糸」 and 「弓」. Although there are various complicated conditions, these elements are still similar to the alphabets of the Western spelling words the number of which is generally about thirty. In Japanese, there

are about one hundred non-Chinese hiragana and katakana. The Chinese characters have about six to seven hundred elements. Therefore, it can be known that the structures of Chinese characters are quite complicated.

The relationship between the radicals and the elements is discussable. However, basically, among the six to seven hundred elements of Chinese characters, about 250 elements or the combinations thereof serve as the radicals for substantially classifying Chinese characters. The classification is mainly used in a dictionary. There are so many complicated radicals which are hard to judge or memorize. Therefore, many people can hardly fully realize or memorize the radicals of every Chinese character. This leads to difficulty in checking a dictionary.

SUMMARY OF THE INVENTION

It is therefore a primary object of the present invention to provide a method for showing the stroke sequence of Chinese character, including steps of: forming the stroke regions of the character pattern or character body; disposing different grades of pixel values or color phases onto the respective stroke regions; and disposing a vector knot in a predetermined position in each stroke region according to the layout of the character pattern or character body. According to the layout of the character pattern or character body, a next stroke region partially overlaps or does not overlap the preceding stroke region to form a complete character

pattern or character body. The adjacent stroke regions of the character pattern have different grades of pixel values or color phases. Accordingly, the character pattern is arranged in one single square block to show both the stroke sequence and imitation direction.

It is a further object of the present invention to provide a method for showing a radical of Chinese character, including steps of: forming the stroke regions of the character pattern or character body; using different fineness of lines as the profiles defining the stroke regions of the radical and non-radical sections; and disposing different grades of pixel values or color phases onto the respective stroke regions of the radical or non-radical sections. Therefore, the radical and non-radical sections have different grades of pixel values or color phases having different densities or chrominance.

In addition, a vector knot can be disposed in a predetermined position in each stroke region. Also, a coarse line can be used as the profile defining the radical section to highlight the radical of the character pattern.

It is still a further object of the present invention to provide a method for showing code-taking principle of computer Chinese character inputting method such as Cheong-Chi(倉頡) Chinese Character inputting method. The computer character pattern is defined with character code sections and non-character code section.

code sections and non-character code section have different grades of pixel values or color phases. In addition, the pixel values or color phases of the character code sections are graded according to the character code taking sequence. Accordingly, by means of this method, a learner can learn and memorize the character code sections and taking sequence of the character code sections in computer input of every Chinese character.

The present invention can be best understood through the following description and accompanying drawings wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a diagram showing a stroke region of a character pattern or character body of the present invention;

Fig. 2 is a diagram showing a next stroke region of the character pattern or character body of the present invention according to Fig. 1;

Fig. 3 shows an array of the graded pixel values of the stroke region of the present invention according to Fig. 1;

Fig. 4 shows a complete character pattern or character body of the present invention;

Fig. 5 shows another complete character pattern or character body of the present invention;

Fig. 6 is a flow chart of the method for establishing and showing the stroke sequence of the present invention;

Fig. 7 shows the stroke regions of the radical section and

Fig. 7 shows the stroke regions of the radical section and non-radical section of a character pattern or character body of the present invention;

Fig. 8 shows a complete character pattern or character body according to Fig. 7;

Fig. 9 shows another complete character pattern or character body of the present invention;

Fig. 10 is a flow chart of the method for establishing and showing the radical of the character pattern or character body of the present invention;

Fig. 11 shows a complete character pattern or character body of the present invention, in which the stroke sequence and radical of the character pattern or character body are both shown;

Fig. 12 shows a complete character pattern or character body of the present invention, in which the character code sections and the non-character code section of the character pattern or character body are shown; and

Fig. 13 shows the comparison between a conventional complicated stroke sequence compiling method and true examples of the stroke sequence and computer character pattern of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to Figs. 1 to 4. In the character pattern stroke sequence/radical showing method of the present invention, a character pattern or character body (Chinese character 「儲」 10

or line 12 defining the stroke region 11. Each stroke region 11 has a head end 13 and a tail end 14. In addition, each stroke region 11 has at least one vector knot 15 arranged in a predetermined position at the head end 13 to show the starting position of the stroke region 11. Accordingly, a relative stroke moving direction between the head end 13 and the tail end 14 is produced so as to easily indicate the imitation direction of one single stroke.

In addition, different sizes of vector knots 15 can be shown in different elements of the Chinese character so as to indicate the stroke sequence between different elements of single Chinese character. This solves the problem existing in the traditional stroke sequence principle that it is hard to judge the stroke sequence between elements from left (upper, outer) side to right (lower, inner) side. For example, a 0.6 point vector knot 15 cooperates with several grades of chrominance of several stroke regions 11 to represent the stroke sequence of a first element. Then, a 1.0 point vector knot 15 cooperates with several grades of chrominance of several stroke regions 11 to represent the stroke sequence of a second element. Then, a 1.5 point vector knot 15 cooperates with several grades of chrominance of several stroke regions 11 to represent the stroke sequence of a third element. Then, a 0.6 point vector knot 15 again cooperates with several grades of chrominance of several stroke regions 11 to represent the stroke sequence of a fourth element. The above is repeatedly cycled, whereby all the Chinese characters at most having thirty and several strokes can be fully shown.

Now, 「灣」 is exemplified. A 0.6 point vector knot 15 cooperates with three grades of chrominance of three stroke regions 11 to represent the three stroke sequence of the first element 「シ」. Then, a 1.0 point vector knot 15 cooperates with seven grades of chrominance of seven stroke regions 11 to represent the seven stroke sequence of the second element 「言」. Then, a 1.5 point vector knot 15 cooperates with six grades of chrominance of six stroke regions 11 to represent the six stroke sequence of the third element 「糸」. Then, a 0.6 point vector knot 15 again cooperates with six grades of chrominance of six stroke regions 11 to represent the six stroke sequence of the fourth element 「糸」. Finally, a 1.0 point vector knot 15 cooperates with three grades of chrominance of three stroke regions 11 to represent the three stroke sequence of the fifth element 「弓」. Accordingly, twenty five stroke sequence of the five elements of 「灣」 can be completely shown.

In fact, the method can be elastically used in accordance with different situations. In the case that the stroke sequences of the elements from left (upper, outer) side to right (lower, inner) side of a certain character are obvious and there are not so many strokes, then the 0.6 point vector knot 15 can be used from the beginning to the end. In the case that the Chinese character has few strokes, then simply four grades of chrominance of 0%, 20%, 50% and 100% are used to enlarge the difference between the grades and facilitate the judgment. In general, by means of mobile cooperation between the at most ten grades of the stroke region 11 and the at most three sizes of the vector knot 15, the stroke sequences and

element sequences of all the Chinese characters can be fully and clearly shown.

A next stroke region 21 can be produced to cover the first stroke region 11 or without covering the first stroke region 11. Fig. 2 shows the next stroke region 21. Similar to the first stroke region 11, the next stroke region 21 a profile or line 22 defining the next stroke region 21. Each next stroke region 21 has a head end 23 and a tail end 24 and a vector knot 25. In comparison with Fig. 1, it can be seen from Fig. 2 that the next stroke region 21 further includes a pixel value or color phase X relative to the first stroke region 11. It is regulated that the pixel value or color phase X of a next stroke region 21 should be thicker or lighter than the pixel value of the first stroke region 11 or the color phase of the next stroke region 21 should be different from the color phase of the first stroke region 11. According to the chrominance of the pixel value or the color phase, the order of the stroke regions 11, 21 can be decided.

Referring to Fig. 3, in this embodiment, the pixel value X of each grade can be presented by means of the density and size of mesh point to show the resolution and chrominance. Basically, different output equipments with different resolution have different identification. For example, a commonly used 600 to 1200 DPI laser printer can be used to show the pixel value X. In this case, at least eight grades of chrominance of 0%, 3%, 8%, 20%, 35%, 50%, 75% and 100% can be clearly shown or ten grades of chrominance of 0%, 3%,

8%, 20%, 30%, 40%, 50%, 65%, 80% and 100% can be clearly shown. In the case that a laser image outputting device is used to present the pixel value X, at least ten or more grades of chrominance of 0%, 5%, 15%, 20%, 30%, 40%, 50%, 60%, 70% and 80% can be clearly shown.

Referring to Figs. 4 and 5, the vector knots 15, 25 are respectively presented by 0.6 point, 1.0 point and 1.5 point dots or other similar indices and the reverse white thereof. (The reverse white is used when the pixel value chrominance of the gray grade of background color of the printed material is over 50%.) The respective stroke regions 11, 21 of the character 10 are presented by different grades of pixel value or color phase X. In principle, the stroke sequence is from left (upper, outer) side to right (lower, inner) side. At least one size of vector knot 15, 25 are used in different elements of the character pattern or character body. The stroke regions 11, 21 partially overlap each other or do not overlap. Accordingly, the stroke sequence and element sequence of a character pattern or character body 10 can be completely shown.

Fig. 6 shows the flow chart of the present invention which includes steps of:

- (a) forming the stroke regions 11, 21 of the character pattern or character body 10, a computer typesetting and drawing application software such as Illustrator, Indesign, Freehand, Corel Draw, etc. being used to define the

character pattern or character body 10 with a fine line of about 0 point, which forms a hollow profile;

- (b) dividing the character pattern or character body 10 into multiple stroke regions 11, 21, a fine line 12, 22 of about 0 point being used as the profile defining the stroke regions 11, 21;
- (c) disposing different grades of pixel values or color phases onto the stroke regions 11, 21, according to the layout of the elements or the stroke sequence principle from left (upper, outer) side to right (lower, inner) side of the character pattern or character body 10, the stroke regions 11, 21 being formed with different densities or chrominance of gray grade arrangement;
- (d) disposing vector knots 15, 25 in the head ends 13, 23 of the stroke regions 11, 21 according to the layout of the character pattern or character body 10 for showing the starting position of each stroke region 11, 21, the relative direction to the tail ends 14, 24 and the stroke sequence of different elements, by means of different sizes of vector knots 15, 25, the stroke sequence of different elements of the character being shown, 0.6 point, 1.0 point and 1.5 point dots or other similar indices and reverse white thereof being usable as the vector knots, then according to the layout of the

character pattern or character body 10, the stroke regions 11, 21 being overlapped or connected to form a complete character pattern or character body 10 stored in a drawing file.

In the method for establishing and showing the character pattern, the character pattern or character body 10 includes different sizes of vector knots 15, 25 and profiles or lines 12, 22 arranged in a square block. The stroke regions 11, 21 have graded pixel values X or color phases to completely show the stroke sequence. This method enables a learner to quickly and conveniently learn the stroke sequence of Chinese characters and has the following advantages:

1. No matter how many strokes a character pattern or character body 10 has, the character pattern or character body 10 can be shown in the same square block with the same size to completely present the stroke sequence. In contrast to the conventional method, a great amount of space of edition face is saved and a learner can still easily judge the stroke sequence.
2. It is unnecessary for a teacher to prepare a great amount of drafts, tables or other similar plane media so that the burden on the teacher is reduced.
3. The troublesome compiling and typesetting operation in the conventional method is simplified so that the

the conventional method is simplified so that the manufacturing cost is minimized.

4. In the conventional method, one Chinese character is divided into several parts to show the stroke sequence. Alternatively, the stroke sequence of a Chinese character is shown by means of denoting the respective strokes with figures or Arabic numerals. Also, multiple lines and arrows are used to indicate the directions of the strokes. The problems existing the above conventional methods are solved by the method of the present invention.
5. Most importantly, the stroke sequence and radical are shown by one single Chinese character. Therefore, it is possible to manufacture computer character pattern of Chinese character stroke sequence. This greatly lowers the compiling and printing cost. In addition, in the future, the method can be widely applied to dictionaries, textbooks, homework books, reference books, etc.

In the Fig. 13, an embodiment employing the stroke sequence character pattern of the present invention is compared with a conventional stroke sequence teaching method.

Fig. 7 shows the method for showing the radical of Chinese character of the present invention. In this method, a character

exemplified) includes at least one stroke region 11 and a profile or line 12 defining the stroke region 11. Each stroke region 11 has a head end 13 and a tail end 14.

A next stroke region 21 partially overlaps or does not overlap the first stroke region 11. Fig. 7 shows the next stroke region 21. Similar to the first stroke region 11, the next stroke region 21 has a profile or line 22 defining the next stroke region 21. Each next stroke region 21 has a head end 23 and a tail end 24. It can be seen from Fig. 7 that the first stroke region 11 and the next stroke region 21 have a pixel value or color phase X for defining the radical 100 of the Chinese character 「儲」. Accordingly, the pixel value or color phase X of the stroke regions 11, 21 of the radical 100 should be thicker or lighter than the pixel value of the stroke regions 11', 21' of a non-radical section 100'. Alternatively, the stroke regions 11, 21 of the radical 100 should have a color phase different from the color phase of the stroke regions 11', 21' of the non-radical section 100'. This can define the radical section 100 and the non-radical section 100' according to the pixel value or chrominance or color phase.

Referring to Figs. 7 and 8, in this embodiment, the non-radical section 100' of the Chinese character 「儲」 10 is a reverse white and distinguishable from the radical section 100. The pixel value or color phase X of the radical section 100 can be presented by means of the density and size of mesh point to show the resolution and chrominance.

Alternatively, the radical section 100 of the Chinese character 10 can be a reverse white and the non-radical section 100' has a grade of pixel value or color phase X. In a derived embodiment, the radical section 100 and the non-radical section 100' has different grades of pixel values or color phases X for distinction. Accordingly, a learner can memorize the radical section 100 of the Chinese character 「儲」 10 by means of the grades of pixel values or color phases X. This saves much time in learning.

Fig. 9 shows another embodiment of the present invention, in which the profiles or lines 12, 22 of the radical section 100 and the non-radical section 100' of the Chinese character 「儲」 10 have different sizes of about 0.5 point and 0 point. This also enables a learner to easily memorize the radical section 100 of the Chinese character 10. This is helpful in checking a dictionary.

Fig. 10 is a flow chart of the method for establishing and showing the character of the present invention. This method includes steps of:

- (a) forming the stroke regions 11, 21 of the character pattern or character body 10, a computer typesetting and drawing application software such as Illustrator, Indesign, Freehand, Corel Draw, etc. being used to define the character pattern or character body 10 with a fine line of about 0 point, which forms a hollow profile;

- (b) dividing the character pattern or character body 10 into stroke regions 11, 21 of a radical section 100 and a non-radical section 100', a fine line 12, 22 of about 0 point being used as the profile defining the stroke regions 11, 21;
- (c) disposing different grades of pixel values or color phases X onto the stroke regions 11, 21, according to the layout of the radical section 100 and non-radical section 100' of the character pattern or character body 10, the stroke regions 11, 21 being formed with different densities or chrominance of gray grade arrangement; and
- (d) disposing about 0.5 point line on the radical section 100 of the character pattern or character body 10 to distinguish from the about 0 point line or profile of the non-radical section 100' of the character pattern or character body 10, then according to the layout of the character pattern or character body 10, the stroke regions 11, 21 being overlapped or connected to form a complete character pattern or character body 10 stored in a drawing file.

Referring to Fig. 11, in a preferred embodiment, a vector knot 15, 25 can be disposed in the head end 13, 23 of each stroke region 11, 21 for showing the starting position of each stroke region 11, 21, the relative direction to the tail ends 14, 24 and the stroke

sequence of different elements. 0.6 point, 1.0 point and 1.5 point dots or other similar indices and reverse white thereof can be used as the vector knots 15, 25. (The reverse white is used when the pixel value chrominance of the gray grade of background color is over 50%.) The respective stroke regions 11, 21 of the character 10 are presented by different grades of pixel value or color phase X. In principle, the stroke sequence is from left (upper, outer) side to right (lower, inner) side. At least two sizes of vector knots 15, 25 are used to define different elements of the character pattern or character body 10. The stroke regions 11, 21 partially overlap each other or do not overlap. Accordingly, the stroke sequence and element sequence of a character pattern or character body 10 can be completely shown. By means of such indication system, when learning the characters, a learner can at the same time learn the stroke sequence of the character pattern or character body 10.

In addition to the grades of color phases for showing the stroke regions, whether the graded stroke regions overlap each other also helps in judging the stroke sequence. That is, the overlapped stroke region has a preceding stroke order, while the overlapping stroke region has a succeeding stroke order. The size of the knot can be 0.6 point, 1.0 point or 1.5 point. The percentage of the grade can be eight grades of chrominance of 0%, 3%, 8%, 20%, 35%, 50%, 75% and 100%. The fineness of the profile can be 0 point or 0.5 point. These are all easily distinguishable.

In the method for establishing and showing the character

pattern, the character pattern or character body 10 includes profiles or lines 12, 22 arranged in a square block. The radical section 100 and non-radical section 100' have graded pixel values X or color phases to show the radical section 100 and non-radical section 100'. This method enables a learner to quickly and conveniently learn the radicals of Chinese characters and has the following advantages:

1. The radical section 100 of each character pattern or character body 10 is highlighted by about 0.5 point profile or line. Alternatively, the radical section 100 is presented by reverse white. Still alternatively, a different grade of pixel value or color phase X is disposed in the stroke regions 11, 21 of the radical section 100. When learning the character pattern or character body 10, a learner can at the same time memorize the radical section 100 of the character pattern or character body 10. Therefore, the learning time and strength and resource are greatly saved.
2. The shown radical section 100 of the complete character pattern or character body 10 enables a learner to more quickly check a dictionary.

Fig. 12 another derived embodiment of the present invention. This embodiment discloses a method for establishing a code-taking principle of Chinese character computer input. In this method, a character pattern or character body such as Chinese character 「儲」

character pattern or character body such as Chinese character 「儲」 10 is exemplified. According to the code-taking principle of Chinese character computer inputting system such as Cheong-Chi(倉頡) Chinese Character inputting method, the Chinese character 「儲」 (referring to Fig. 12) can be divided into several character code sections A, B, C and D. These character code sections A, B, C and D have different pixel values or color phases X, X1, X2, X3. Therefore, the character code sections A, B, C and D are distinguishable from the non-character code section 100". Fig. 12 shows that the non-character code section 100" has no pixel value or color phase.

In this method, the pixel values or color phases X, X1, X2, X3 of the character code sections A, B, C and D have different chrominance. The pixel values or color phases X, X1, X2, X3 of the character code sections A, B, C and D can be gradated from lighter chrominance to thicker chrominance so as to show the character code inputting sequence or character code taking sequence of the character pattern or character body 10. Accordingly, by means of this method, a learner can learn and memorize the character code sections and taking sequence of the character code sections in computer input of every Chinese character.

Therefore, the present invention also provides a method for showing the radical of a character pattern and the character pattern established by the method.

modifications of the above embodiments can be made without departing from the spirit of the present invention.

WHAT IS CLAIMED IS:

1. A computer character pattern for teaching Chinese character, comprising at least one stroke region forming a character pattern or character body, the stroke region including a profile or a line defining the stroke region, the computer character pattern further comprising a next stroke region which partially overlaps or does not overlap the preceding stroke region, the next stroke region including a pixel value relative to the first stroke region, whereby the adjacent stroke regions have different grades of pixel values or color phases.
2. The computer character pattern as claimed in claim 1, wherein each stroke region has a head end and a tail end, at least one vector knot being disposed in a position in the stroke region near the head end or tail end.
3. The computer character pattern as claimed in claim 1 or 2, wherein the pixel value or color phase of the next stroke region is thicker or lighter than the pixel value or color phase of the preceding stroke region.
4. The computer character pattern as claimed in claim 1 or 2, wherein according to the layout of the character pattern or character body, the vector knot is a dot with a selected size or other similar indices.

5. The computer character pattern as claimed in claim 4, wherein the vector knot is a reverse white of a dot or other similar indices.
6. The computer character pattern as claimed in claim 3, wherein according to the layout of the character pattern or character body, the vector knot is a dot with a selected size or other similar indices.
7. The computer character pattern as claimed in claim 6, wherein the vector knot is a reverse white of a dot or other similar indices.
8. The computer character pattern as claimed in claim 1, wherein the stroke region has a hollow form.
9. A method for showing the stroke sequence of Chinese character, comprising steps of:
 - (a) forming the stroke regions of the character pattern or character body;
 - (b) disposing different grades of pixel values or color phases onto the respective stroke regions; and
 - (c) according to the layout of the character pattern or character body, overlapping or connecting the stroke

regions to form a complete character pattern or character body.

10. The method as claimed in claim 9, further comprising a step after step (b) as follows:

(b1) disposing a vector knot in a predetermined position in each stroke region according to the layout of the character pattern or character body.

11. The method as claimed in claim 10, further comprising a step after step (a) as follows:

(a1) dividing the character pattern or character body into multiple stroke regions.

12. The method as claimed in claim 11, wherein a fine line of about 0 point is used as the profile defining each stroke region.

13. The method as claimed in claim 12, wherein according to the stroke sequence of the character pattern or character body, the respective stroke regions have different grades of pixel values or color phases from left (upper, outer) side to right (lower, inner) side.

14. The method as claimed in claim 9 or 13, wherein the different grades of pixel values or color phases have different densities

or chrominance arranged in gray grades.

15. The method as claimed in claim 10, wherein in step (b1), the vector knot is disposed in a predetermined position in the head end or tail end of the stroke region.
16. The method as claimed in claim 10, wherein in step (b1), according to the layout of the character pattern or character body and the stroke sequences between different elements of the character pattern or character body, the vector knot is a dot with a selected size or other similar indices.
17. The method as claimed in claim 10, wherein in step (b1), according to the layout of the character pattern or character body and the stroke sequences between different elements of the character pattern or character body, the vector knot is a reverse white of a dot with a selected size or other similar indices.
18. The method as claimed in claim 10, wherein in step (a), the stroke region has a hollow form.
19. A computer character pattern for teaching Chinese character, comprising at least one stroke region forming a character pattern or character body, the stroke region including a profile or a line defining the stroke region, the computer character pattern being defined with a radical section and a non-radical section.

20. The computer character pattern as claimed in claim 19, wherein the stroke regions of at least one of the radical section and non-radical section have a pixel value, whereby the stroke regions of the adjacent radical section and non-radical section have different grades of pixel values or color phases.
21. The computer character pattern as claimed in claim 19, wherein each stroke region has a head end and a tail end.
22. The computer character pattern as claimed in claim 19, wherein the pixel value or color phase of the preceding stroke region and next stroke region of the radical section is thicker or lighter than the pixel value or color phase of the preceding stroke region and next stroke region of the non-radical section.
23. The computer character pattern as claimed in claim 19, wherein the radical section or non-radical section can be reverse-white.
24. The computer character pattern as claimed in claim 19, wherein a line of about 0 point is used as the profile defining the non-radical section.
25. The computer character pattern as claimed in claim 19 or 24, wherein a line of about 0.5 point is used as the profile defining the radical section.
26. A computer character pattern for teaching Chinese character,

comprising at least one stroke region forming a character pattern or character body, the stroke region including a profile or a line defining the stroke region, the profile of the stroke region being formed by coarser line to highlight the radical section of the character pattern or character body.

27. The computer character pattern as claimed in claim 19 or 21, wherein the stroke region further includes at least one vector knot disposed in a predetermined position in the head end of the stroke region and wherein a next stroke region partially overlaps or does not overlap the preceding stroke region, the next stroke region including a pixel value relative to the first stroke region, whereby the adjacent stroke regions have different grades of pixel values or color phases.

28. A method for showing a radical of Chinese character, comprising steps of:

- (a) forming the stroke regions of the character pattern or character body;
- (b) disposing different grades of pixel values or color phases onto the respective stroke regions; and
- (c) according to the layout of the character pattern or character body, overlapping or connecting the stroke regions to form a complete character pattern or character

body.

29. The method as claimed in claim 28, further comprising a step after step (a) as follows:

(a1) dividing the character pattern or character body into stroke regions of radical section and non-radical section.

30. The method as claimed in claim 29, wherein a fine line of about 0 point is used as the profile defining each stroke region of the non-radical section.

31. The method as claimed in claim 28, wherein the different grades of pixel values or color phases have different densities or chrominance arranged in gray grades.

32. The method as claimed in claim 28, further comprising a step after step (c) as follows:

(c1) using a coarse line as the profile defining the radical section.

33. The method as claimed in claim 32, wherein the coarse line of the radical section is about 0.5 point.

34. The method as claimed in claim 28, further comprising a step after step (b) as follows:

(b1) disposing a vector knot in a predetermined position in the head end or tail end of the stroke region.

35. The method as claimed in claim 34, wherein in step (b1), the vector knot is a dot with a selected size or other similar indices.
36. The method as claimed in claim 34, wherein in step (b1), the vector knot is a reverse white of a dot with a selected size or other similar indices.
37. The method as claimed in claim 28, wherein in step (a), the stroke region has a hollow form.
38. A computer character pattern for teaching Chinese character, comprising at least one stroke region forming a character pattern or character body, the stroke region including a profile or a line defining the stroke region, the computer character pattern being defined with character code sections and non-character code section, the stroke regions of the character code sections and non-character code section having different grades of pixel values or color phases.
39. The computer character pattern as claimed in claim 38, wherein the pixel value or color phase of the character code sections is thicker than the pixel value or color phase of the non-character code section.

40. The computer character pattern as claimed in claim 38, wherein the pixel values or color phases of the character code sections are graded according to the character code taking sequence.

41. The computer character pattern as claimed in claim 39, wherein the pixel values or color phases of the character code sections are graded according to the character code taking sequence.