A Line in Motion

by
Si (Sue) Chen

A thesis
presented to the University of Waterloo
in fulfilment of the
thesis requirement for the degree of
Master of Architecture

Waterloo, Ontario, Canada, 2009
©Si (Sue) Chen 2009
Author’s Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
Abstract

This is a graphic account, showing various spaces found in a work of Chinese calligraphy, using, for analysis, the work of contemporary calligrapher Noriko Maeda, historical examples by Wang Hui, Wang Xizhi, Wen Cheng Ming, Dong Qichang and Li Chun’s treatise on calligraphy, The 84 Laws.

Chinese calligraphy is a spatial practice: a sensibility combining graphic design and kinesis. The Chinese character is a line graph centered within an imaginary square and written in a prescribed way using rules of stroke order, ensuring that the lines of a word are added systematically, and in the same order each time the word is painted. In Chinese calligraphy, the hand moves in the x- and y-axes — horizontally, vertically, laterally, diagonally — and the z-axis — up and down in relation to the paper. Stroke order ensures that no move is repeated successively. When a brush makes contact with a hard surface, the tip flexes, and the brush responds to a downward force; in this way, a brushstroke is a record of a hand gesture. Going beyond a two-dimensioned graphic, the brush makes active the up-and-down axis, the z-axis; writing is a gesture that operates in three dimensions: as one writes, the hand inscribes a physical space, moves circuitously over a spot while pushing and lifting the brush.

But the Chinese character is also a descriptor of time. The five styles — Hsiao Chuan, Li, Tsao, Chen, Tsing — represent the evolution of the character form in its relation to the timing of the strokes. The calligrapher’s art is in his control of timing: in essence, knowing when to stop, when to go, and when to turn. Environmental and emotional circumstances affect the calligrapher’s sense of timing, so that every piece of calligraphy is unique, specific to the moment of its creation.

A brush character is not a simple graphic, but rather, it is a notation of movement, mapping the passage of the hand over the page. A piece of calligraphy demonstrates a hand and brush in motion, the product of a moment’s creativity at a specific place and time.
Acknowledgements

I am especially grateful to my supervisor Donald Mckay, for his encouragement, insights and friendship. I want to thank Fred Thompson for jump-starting this endeavor and Robert Jan van Pelt for asking the tough questions.

I am indebted to Noriko Maeda for sharing her knowledge of calligraphy, Professor Lou Yongqi who helped renew my interest in the craft and Krista Duynisveld, Laura Smith and Mark Longo for their continuing support.

Finally, I thank my parents for always putting me first.
Dedication

For mom, dad, and xiaoyi
Contents

List of Illustrations

1 Lan Ting
3 Time, Space, Calligraphy and Architecture
7 01: A Landscape Continuously Unfolding

41 02: Lessons from Old Masters
45 Linguistics
47 Form as Poetry
51 Calligraphic Style
59 The Eight Laws of Yong
67 Graphic Design
95 A Reservoir of Knowledge

111 03: Dynamics
113 Brush Technique
141 Calligraphic Space: A Function of Accumulated Time

149 Conclusion

158 Notes
159 Appendix
162 Bibliography
# List of Illustrations

<table>
<thead>
<tr>
<th>FIG.</th>
<th>PG.</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>xiv</td>
<td>The Orchid Pavilion, 2008 Photograph by author</td>
</tr>
<tr>
<td>1.2</td>
<td>6</td>
<td>Countless Peaks and Vales Symbols of Eternity: The art of landscape painting in China: 143</td>
</tr>
<tr>
<td>1.3</td>
<td>8</td>
<td>Countless Peaks and Vales Symbols of Eternity: The art of landscape painting in China: 143</td>
</tr>
<tr>
<td>1.4</td>
<td>10</td>
<td>Repeating Motifs Drawing by author</td>
</tr>
<tr>
<td>1.5</td>
<td>11</td>
<td>Countless Peaks and Vales Symbols of Eternity: The art of landscape painting in China: 143</td>
</tr>
<tr>
<td>1.6</td>
<td>12-13</td>
<td>The Whole and the Fragments. Drawing by author</td>
</tr>
<tr>
<td>1.7</td>
<td>14-15</td>
<td>Five Horizontal Fragments Drawing by author</td>
</tr>
<tr>
<td>1.8</td>
<td>17</td>
<td>Shi Calligraphy by author</td>
</tr>
<tr>
<td>1.9</td>
<td>18-19</td>
<td>The Shi in Stroke Order Drawing by author</td>
</tr>
<tr>
<td>1.10</td>
<td>20-21</td>
<td>The Shi in Stroke Order Drawing by author</td>
</tr>
<tr>
<td>1.11</td>
<td>22</td>
<td>Wang Hsi-chih: Huang T’ing Ching Chinese Calligrapher and Their Art: 57</td>
</tr>
<tr>
<td>1.12</td>
<td>23</td>
<td>Balance of Stroke Direction Drawing by author</td>
</tr>
<tr>
<td>1.13</td>
<td>24-25</td>
<td>The Exchange of Balance Drawing by author</td>
</tr>
<tr>
<td>1.14</td>
<td>26-27</td>
<td>The Exchange of Balance Drawing by author</td>
</tr>
<tr>
<td>1.15</td>
<td>28-29</td>
<td>Opposition Drawing by author</td>
</tr>
<tr>
<td>1.16</td>
<td>31</td>
<td>Countless Peaks and Vales Symbols of Eternity: The art of landscape painting in China: 143</td>
</tr>
<tr>
<td>1.17</td>
<td>32</td>
<td>Countless Peaks and Vales Symbols of Eternity: The art of landscape painting in China: 143</td>
</tr>
<tr>
<td>1.18</td>
<td>34-35</td>
<td>Repeating Gestures Drawing by author</td>
</tr>
<tr>
<td>FIG.</td>
<td>PG.</td>
<td>SOURCE</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>1.19</td>
<td>36-37</td>
<td>Opposition. Drawing by author</td>
</tr>
<tr>
<td>1.20</td>
<td>38-39</td>
<td>Shifting Sightlines Drawing by author</td>
</tr>
<tr>
<td>2.1</td>
<td>40</td>
<td>Chinese New Year's lucky writing photograph by Fung Kong Yui from: China Chic: 228-229</td>
</tr>
<tr>
<td>2.2</td>
<td>42-43</td>
<td>Calligraphy Timeline Drawing by author</td>
</tr>
<tr>
<td>2.3</td>
<td>44</td>
<td>Linguistic Structure Drawing by author</td>
</tr>
<tr>
<td>2.4</td>
<td>48</td>
<td>Ren Jian MZ: Man Sees Horse Calligraphy by author</td>
</tr>
<tr>
<td>2.5</td>
<td>50</td>
<td>Po Kua Chinese Calligrapher and Their Art: 3</td>
</tr>
<tr>
<td>2.6</td>
<td>50</td>
<td>Oracle Bone Chinese Calligrapher and Their Art: 14</td>
</tr>
<tr>
<td>2.7</td>
<td>50</td>
<td>I Shan Pei Chinese Calligrapher and Their Art: 33</td>
</tr>
<tr>
<td>2.8</td>
<td>50</td>
<td>I Ying Pei Chinese Calligrapher and Their Art: 41</td>
</tr>
<tr>
<td>2.9</td>
<td>50</td>
<td>Wang Hsi-chih: Shih Chi T'ieh Chinese Calligrapher and Their Art: 65</td>
</tr>
<tr>
<td>2.10</td>
<td>50</td>
<td>Wang Hsi-chih: Huang Ting Ching Chinese Calligrapher and Their Art: 57</td>
</tr>
<tr>
<td>2.11</td>
<td>50</td>
<td>Sheng Chiao Hsu Chinese Calligrapher and Their Art: 63</td>
</tr>
<tr>
<td>2.12</td>
<td>52</td>
<td>Hard Positions Drawing by author</td>
</tr>
<tr>
<td>2.13</td>
<td>52</td>
<td>Brushes Calligraphy by Noriko Maeda and photograph by author</td>
</tr>
<tr>
<td>2.14</td>
<td>53</td>
<td>Paper and Ink Drawing by author</td>
</tr>
<tr>
<td>2.15</td>
<td>55</td>
<td>Yong Calligraphy by author</td>
</tr>
<tr>
<td>2.16</td>
<td>57</td>
<td>Stroke Order of Yong Drawing by author</td>
</tr>
<tr>
<td>2.17</td>
<td>58</td>
<td>Strokes: T's'e, La, Nu, Yo Drawing by author</td>
</tr>
<tr>
<td>2.18</td>
<td>60</td>
<td>Strokes: Tse, Cha, Lueh, Chih Drawing by author</td>
</tr>
<tr>
<td>FIG.</td>
<td>PG.</td>
<td>SOURCE</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>2.19</td>
<td>62-63</td>
<td>Composition of Yong Drawing by author</td>
</tr>
<tr>
<td>2.20</td>
<td>64-65</td>
<td>Composition of Yong Drawing by author</td>
</tr>
<tr>
<td>2.21</td>
<td>67</td>
<td>Calligraphy Figure-Ground Drawing by author, calligraphy by Wang Xizhi</td>
</tr>
<tr>
<td>2.22</td>
<td>68</td>
<td>Law 1 Drawing by author</td>
</tr>
<tr>
<td>2.23</td>
<td>68</td>
<td>Law 2 Drawing by author</td>
</tr>
<tr>
<td>2.24</td>
<td>68</td>
<td>Law 3 Drawing by author</td>
</tr>
<tr>
<td>2.25</td>
<td>68</td>
<td>Law 4 Drawing by author</td>
</tr>
<tr>
<td>2.26</td>
<td>69</td>
<td>Law 5 Drawing by author</td>
</tr>
<tr>
<td>2.27</td>
<td>69</td>
<td>Law 6 Drawing by author</td>
</tr>
<tr>
<td>2.28</td>
<td>69</td>
<td>Law 7 Drawing by author</td>
</tr>
<tr>
<td>2.29</td>
<td>69</td>
<td>Law 8 Drawing by author</td>
</tr>
<tr>
<td>2.30</td>
<td>70</td>
<td>Law 9 Drawing by author</td>
</tr>
<tr>
<td>2.31</td>
<td>70</td>
<td>Law 10 Drawing by author</td>
</tr>
<tr>
<td>2.32</td>
<td>70</td>
<td>Law 11 Drawing by author</td>
</tr>
<tr>
<td>2.33</td>
<td>70</td>
<td>Law 12 Drawing by author</td>
</tr>
<tr>
<td>2.34</td>
<td>71</td>
<td>Law 13 Drawing by author</td>
</tr>
<tr>
<td>2.35</td>
<td>71</td>
<td>Law 14 Drawing by author</td>
</tr>
<tr>
<td>2.36</td>
<td>71</td>
<td>Law 15 Drawing by author</td>
</tr>
<tr>
<td>2.37</td>
<td>71</td>
<td>Law 16 Drawing by author</td>
</tr>
<tr>
<td>2.38</td>
<td>72</td>
<td>Law 17 Drawing by author</td>
</tr>
<tr>
<td>2.39</td>
<td>72</td>
<td>Law 18 Drawing by author</td>
</tr>
<tr>
<td>2.40</td>
<td>72</td>
<td>Law 19 Drawing by author</td>
</tr>
<tr>
<td>2.41</td>
<td>73</td>
<td>Law 21 Drawing by author</td>
</tr>
<tr>
<td>2.42</td>
<td>73</td>
<td>Law 22 Drawing by author</td>
</tr>
<tr>
<td>2.43</td>
<td>73</td>
<td>Law 23 Drawing by author</td>
</tr>
<tr>
<td>2.44</td>
<td>73</td>
<td>Law 24 Drawing by author</td>
</tr>
<tr>
<td>2.45</td>
<td>74</td>
<td>Law 25 Drawing by author</td>
</tr>
<tr>
<td>2.46</td>
<td>74</td>
<td>Law 26 Drawing by author</td>
</tr>
<tr>
<td>2.47</td>
<td>74</td>
<td>Law 27 Drawing by author</td>
</tr>
<tr>
<td>2.48</td>
<td>74</td>
<td>Law 28 Drawing by author</td>
</tr>
<tr>
<td>2.49</td>
<td>75</td>
<td>Law 29 Drawing by author</td>
</tr>
<tr>
<td>2.50</td>
<td>75</td>
<td>Law 30 Drawing by author</td>
</tr>
<tr>
<td>2.51</td>
<td>75</td>
<td>Law 31 Drawing by author</td>
</tr>
<tr>
<td>FIG.</td>
<td>PG.</td>
<td>SOURCE</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>2.52</td>
<td>75</td>
<td>Law 32 (Drawing by author)</td>
</tr>
<tr>
<td>2.53</td>
<td>76</td>
<td>Law 33 (Drawing by author)</td>
</tr>
<tr>
<td>2.54</td>
<td>76</td>
<td>Law 34 (Drawing by author)</td>
</tr>
<tr>
<td>2.55</td>
<td>76</td>
<td>Law 35 (Drawing by author)</td>
</tr>
<tr>
<td>2.56</td>
<td>76</td>
<td>Law 36 (Drawing by author)</td>
</tr>
<tr>
<td>2.57</td>
<td>77</td>
<td>Law 37 (Drawing by author)</td>
</tr>
<tr>
<td>2.58</td>
<td>77</td>
<td>Law 38 (Drawing by author)</td>
</tr>
<tr>
<td>2.59</td>
<td>77</td>
<td>Law 39 (Drawing by author)</td>
</tr>
<tr>
<td>2.60</td>
<td>77</td>
<td>Law 40 (Drawing by author)</td>
</tr>
<tr>
<td>2.61</td>
<td>78</td>
<td>Law 41 (Drawing by author)</td>
</tr>
<tr>
<td>2.62</td>
<td>78</td>
<td>Law 42 (Drawing by author)</td>
</tr>
<tr>
<td>2.63</td>
<td>78</td>
<td>Law 43 (Drawing by author)</td>
</tr>
<tr>
<td>2.64</td>
<td>78</td>
<td>Law 44 (Drawing by author)</td>
</tr>
<tr>
<td>2.65</td>
<td>79</td>
<td>Law 45 (Drawing by author)</td>
</tr>
<tr>
<td>2.66</td>
<td>79</td>
<td>Law 46 (Drawing by author)</td>
</tr>
<tr>
<td>2.67</td>
<td>79</td>
<td>Law 47 (Drawing by author)</td>
</tr>
<tr>
<td>2.68</td>
<td>79</td>
<td>Law 48 (Drawing by author)</td>
</tr>
<tr>
<td>2.69</td>
<td>80</td>
<td>Law 49 (By author)</td>
</tr>
<tr>
<td>2.70</td>
<td>80</td>
<td>Law 50 (Drawing by author)</td>
</tr>
<tr>
<td>2.71</td>
<td>80</td>
<td>Law 51 (Drawing by author)</td>
</tr>
<tr>
<td>2.72</td>
<td>80</td>
<td>Law 52 (Drawing by author)</td>
</tr>
<tr>
<td>2.73</td>
<td>81</td>
<td>Law 53 (Drawing by author)</td>
</tr>
<tr>
<td>2.74</td>
<td>81</td>
<td>Law 54 (Drawing by author)</td>
</tr>
<tr>
<td>2.75</td>
<td>81</td>
<td>Law 55 (Drawing by author)</td>
</tr>
<tr>
<td>2.76</td>
<td>81</td>
<td>Law 56 (Drawing by author)</td>
</tr>
<tr>
<td>2.77</td>
<td>82</td>
<td>Law 59 (Drawing by author)</td>
</tr>
<tr>
<td>2.78</td>
<td>82</td>
<td>Law 60 (Drawing by author)</td>
</tr>
<tr>
<td>2.79</td>
<td>83</td>
<td>Law 61 (Drawing by author)</td>
</tr>
<tr>
<td>2.80</td>
<td>83</td>
<td>Law 62 (Drawing by author)</td>
</tr>
<tr>
<td>2.81</td>
<td>83</td>
<td>Law 63 (Drawing by author)</td>
</tr>
<tr>
<td>2.82</td>
<td>83</td>
<td>Law 64 (Drawing by author)</td>
</tr>
<tr>
<td>2.83</td>
<td>84</td>
<td>Law 65 (Drawing by author)</td>
</tr>
<tr>
<td>2.84</td>
<td>84</td>
<td>Law 66 (Drawing by author)</td>
</tr>
<tr>
<td>FIG.</td>
<td>PG.</td>
<td>SOURCE</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>--------</td>
</tr>
</tbody>
</table>
| 2.85 | 85  | Law 69  
Drawing by author |
| 2.86 | 85  | Law 70  
Drawing by author |
| 2.87 | 85  | Law 71  
Drawing by author |
| 2.88 | 85  | Law 72  
Drawing by author |
| 2.89 | 86  | Law 73  
Drawing by author |
| 2.90 | 86  | Law 74  
Drawing by author |
| 2.91 | 87  | Law 75  
Drawing by author |
| 2.92 | 87  | Law 78  
drawing by author |
| 2.93 | 88  | Law 81  
Drawing by author |
| 2.94 | 88  | Law 82  
Drawing by author |
| 2.95 | 90  | Character Arrangement  
Drawing by author, calligraphy by Noriko Maeda |
| 2.96 | 91  | Character Arrangement  
Drawing by author, calligraphy by Noriko Maeda |
| 2.97 | 92  | Character Arrangement  
Drawing by author, calligraphy by Noriko Maeda |
| 2.98 | 93  | Character Arrangement  
Drawing by author, calligraphy by Noriko Maeda |
| 2.99 | 95  | Qian Zi Wen in Four Scripts  
Drawing by author, calligraphy by Wen Cheng-ming |
| 2.100| 96  | Qian Zi Wen in Four Scripts  
Drawing by author, calligraphy by Wen Cheng-ming |
| 2.101| 97  | Qian Zi Wen in Four Scripts  
Drawing by author, calligraphy by Wen Cheng-ming |
| 2.102| 98  | Qian Zi Wen in Four Scripts  
Drawing by author, calligraphy by Wen Cheng-ming |
| 2.103| 100-101 | Flower ‘Hua’ in Five Styles  
Calligraphy by author |
| 2.104| 102-103 | Flower ‘Hua’ in Five Styles  
By author |
| 2.105| 104-105 | Flower ‘Hua’ in Five Styles  
Drawing by author |
| 2.106| 107  | Flower ‘Hua’ in Cursive Script  
Calligraphy by author |
| 2.107| 108 | Law 69  
Drawing by author |
| 2.108| 109 | Law 70  
Drawing by author |
| 2.109| 110 | Law 71  
Drawing by author |
| 2.110| 111 | Law 72  
Drawing by author |
| 2.111| 112 | Law 73  
Drawing by author |
| 2.112| 113 | Law 74  
Drawing by author |
| 2.113| 114 | Law 75  
Drawing by author |
| 2.114| 115 | Law 78  
drawing by author |
| 2.115| 116 | Law 81  
Drawing by author |
| 2.116| 117 | Law 82  
Drawing by author |
| 2.117| 118 | Character Arrangement  
Drawing by author, calligraphy by Noriko Maeda |
<table>
<thead>
<tr>
<th>FIG.</th>
<th>PG.</th>
<th>SOURCE</th>
</tr>
</thead>
</table>
| 3.1  | 110  | Writing a horizontal stroke.  
*Image by author* |
| 3.2  | 114  | Sentence Order  
*Drawing by author, calligraphy by Wang Xizhi* |
| 3.3  | 115  | Character Order  
*Drawing by author, calligraphy by Wang Xizhi* |
| 3.4  | 116  | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.5  | 117  | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.6  | 118  | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.7  | 119  | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.8  | 120- | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.9  | 122- | Stroke Order  
*Image by author, calligraphy from 李淳大学结构八十四法* |
| 3.10 | 124  | Front  
*Calligraphy by author* |
| 3.11 | 125  | Back  
*Calligraphy by author* |
| 3.12 | 126-127 | Movement in Section  
Drawing by author |
| 3.13 | 129  | ‘Wu’  
*Calligraphy by author, Character Order* |
| 3.14 | 130- | ‘Wu’  
*Image by author* |
| 3.15 | 136-137 | ‘Zhong’: Two Variations on Scale.  
*Image by author, video from http://www.youtube.com/watch?v=dbCzvclxNQ* |
| 3.16 | 143  | Calligraphy in Running and Cursive Script  
*Chinese Calligraphy: 84-85* |
| 3.17 | 144  | Lan Ting Xu  
http://www.chinapage.com/calligraphy/wangxizhi/lantingxu.html |
| 3.18 | 146-147 | Calligraphy in Running and Cursive Script  
*Chinese Calligraphy: 84-85* |
It was a wet November morning, my last day in Shaoxing, when I visited Orchid Hill Park. I entered the park and followed a winding path that cut through a bamboo grove, with the sound of raindrops lightly tapping my umbrella. Bamboo shadows patterned the slick stone paving under my feet and the path led me to a small pavilion situated at the edge of a lily pond. The pavilion was raised upon a platform three steps high and four stone columns supported its sweeping gable roof. Inside, there was a stone tablet that read “Lan Ting.” During the Spring Autumn Period, at the foot of a hill, a pavilion filled the spot where orchids once stood. And so, it was named Lan Ting, or the Orchid Pavilion. In the spring of 353, Wang Xizhi and forty-one of his friends and family gathered at Lan Ting. For the literati, spring was a time of renewal, a time when the return to nature washes away the grime of winter. Wang and his group played a game by the pavilion. They floated cups of wine down the stream, drank and wrote poetry. Wang wrote the preface for this group of poems titled “Lan Ting Shu,” a work that many consider to be a masterpiece of Chinese calligraphy. Looking at the fabled pavilion, I remembered thinking, “this is it, where was the stream or the hill?” The significance and meaning of this place was now marked only by two words. Except for the inscription, the building was simple and ordinary. I had come chasing the place that inspired a masterpiece. I had also come looking for clues that might close the gap between my present and that spring day back in 353. I wanted inspiration, but nothing remarkable happened.
Order and Inflection

Chinese calligraphy – the art of brush writing – is not unlike a performing art: a calligrapher in partnership with a brush. Like a dancer, the calligrapher's hand moves rhythmically in a serpentine path across a stage of paper. The boundaries of the word are marked by a hand in motion; a space is inscribed. A prescribed order for the brushstrokes and a fluid but rigorous brush technique allow for a variety of letterforms. The rules and the training, do no disguise the human presence. Mistakes, or digressions are both opportunities. In writing, the calligrapher constantly adjusts his movements based on the emerging circumstance of the letterform. The final form is a synthesis of planned and unanticipated parts, of system and digression, of order and inflection. The technique neither ignores nor pacifies the unexpected. Instead, the letterformat – stroke order and style – leave the calligrapher free to invest his work with emotion and expression.

The calligrapher Wang Xizhi was perhaps the greatest brush performer. For millennia, his written works have charmed emperors, scholars, and common men. His most prestigious work, "Lan Ting Shu," written at a small pavilion located near the city of Shaoxing, made the architecture of that building world famous. The Orchid Pavilion, became a setting for a great performance. The event – a drinking party among forty-one friends and family members – the feelings evoked – camaraderie, love of the surrounding landscape – are beautifully preserved in Wang Xizhi's lines. In his calligraphy, the words and the spontaneous, varied expressive letterform work together to evoke a moment, a place, and the sense of the party. Today, thousands of people come to Shaoxing to share that same space. They believe that the calligraphy, in its form, describes a space and a moment. They come to confirm that belief.
One cannot hope to design spontaneity, but one can design a charged environment – a stage that inspires spontaneity.

Calligraphy is deceptively spontaneous. The finished product – especially in the style of cursive script – is fluid, chaotic, and random, but each part, even at the scale of a single stroke is choreographed, intentionally made. Calligraphy makes the most of the fluid characteristics of brush and ink. Fluid lines seem to mimic the energy and appearance of nature. In China, even things found in nature are deliberately altered and positioned. The constructed experience is no less true than a natural one, a constructed nature is no less suspect. Deliberate intervention, in other words design, makes an object or a circumstance’s inherent qualities visible. The best design comes from understanding the material, its characteristics and context, then leaving room for the unexpected to creep in.

Montage and Scanning

Each word within a finished piece of calligraphy is self-contained, an independent spatial experience. The words have a specific meaning, they describe a particular rhythm of movement, and on the page they are separated from each other across the space of the paper. The finished word of calligraphy is a field, ranked and filed, of spatial experience.

The words in a Chinese text are arranged vertically, and one reads by scanning each column from the top down, starting from the right side of the page. The experience of reading brush-drawn Chinese depends on jumps from one field (of idea, experience) into the next. The reader participates in this experience: the connections between two terms are found in the gaps and the reader does the connecting. Continuous narratives do not exist and they are perhaps not necessary.

The way calligraphy and Chinese landscape painting represent space challenges the traditional sense of space as a continuous line from the eye to the horizon. Chinese space is perhaps more appropriately described as “spacing.”

static condition whereas “spacing” is an active process. Eastern aesthetic practices deliberately make gaps. In calligraphy, the inked stroke is balanced by the paper untouched. In a painting, a scene shifts abruptly from a position up close to a position in the distance; motifs can suddenly appear then disappear. If we do not align spaces in one narrative, if we scan separate fields and make the leap between them, what type of space are we dealing with? Spacing is a liberating act because it breaks the convention of having everything “fall in line.” Time isn’t the “line keeper.” A multitude of circumstance exist simultaneously. The past is mutable, things have happened, can happen again. Circumstances are judged pragmatically, choices are made based on usefulness rather than on provenance. Within a piece of calligraphy, words written in Standard style can morph into a Cursive style, depending on the purpose at the moment.

Movement – the sense of forward motion – reigned in by a few rules, is what keeps this spatial strategy from becoming unnavigable. Motion propels the leaps from one field to the next. Chinese writing isn’t well-behaved. The form can change radically. Chinese art or space doesn’t follow a single arc; there are always several narratives running in parallel to the main story. Things unfold, then disappear, then reappear.

For the Chinese, the events of the past provide valuable lessons for solving problems in the present. The shape of the future, however, is pliable.

As a architect, I’ve always associated clarity with reduction. Calligraphy is incredibly clear even when it is complex and expansive. Any attempt to reduce the art strips it of its potency. Rules clarify. The creative act should be open ended. Instead of making rules that predict and determine an end, perhaps we should design them instead to decipher existing circumstances, to add to the field, to find new patterns.
The Renaissance established the codes of traditional Western perspective. A specific geometry, originating from a line at the viewer’s eye level, constructs a third dimension according to one or more fixed vanishing points placed along that line. Perspective thus establishes a precise point in space to which all other points relate. Space is here defined by points, straight lines and planes. Perspectival art renders space uniform, where the subjects are framed and fixed in position. In contrast to this code, Chinese art uses black outlines to draw the subjects and a variety of tones to produce details. Motifs are repeated and the subject matter often extends past the picture plane. Chinese calligraphy, moreover, focuses strictly on line work. As Chinese art and graphic expression is, in essence, a graphic of two dimensions, it questions the visual representation of depth and space.

1.2 (Opposite) Partial of Countless Peaks and Vales, Wang Hui, 1693
Hanging in the National Palace Museum in Taipei is “Countless Peaks and Vales,” an eight foot high scroll from 1693 by Qing Dynasty artist Wang Hui. A prominent and gifted painter of the 17th Century, Wang Hui first made his reputation by copying old masterworks. Drawing on past influences he writes: “I must use the brush and ink of the Yuan to move the peaks and valleys of the Song, and infuse them with the breath-resonance of the Tang. I will then have a work of the Great Synthesis.” The Song Dynasty saw the rise of the scholar literati class and marked the beginning of monumental landscape painting. During this period, painting became a mode of personal expression. The literati painters began composing the landscape to show natural orders, which they believed were missing in active society. Painting of the Yuan and Ming Dynasty moved away from literal representation. Instead, the calligraphic lines themselves carried the life of a landscape. Wang’s mentor, Dong Qichang, stressed: “If one considers the uniqueness of scenery, then a painting is not the equal of real landscape; but if one considers the wonderful excellence of brush and ink, then landscape can never equal painting.” Thus, Wang Hui’s style is a combination of detailed rendering and evocative calligraphic brushwork.

In “Countless Peaks and Vales,” the colour palette is black, grey and the natural buff of the paper itself. The subject is a river gorge – a typical landscape in the regions south of the Yangtze River. The skillful placement of water and rocks divides the picture plane into various zones. The repetition of mountain summits, shaped like spearheads, from the top of the scroll downwards, draws the eye to rest near the center of the picture. Here the cliff face lies bare, its ridges scattered with a fine stubble of shrubs. In the top half, the mountain pass is most visible from the left-hand side. It is a close view in elevation and takes up two-thirds of the scroll. Into the distance, the peaks decrease in height as they gradually disappear behind the mist. Four long lines of calligraphy at the top right of the scroll mirror seven short lines of text at the top left. Rock and water intersect at the very center while, to the far left, a stream carves through the mountain, eventually tumbling over an edge. From the far right, a river rushes in and two fishers paddle against its current. There is a sudden change of scale as though the

eye sees the scene from above. Clusters of trees line the river’s edge and two villages appear in view, one village beside the river, the other tucked inside a valley. The river, following an arcuate path, divides the bottom portion into halves. On the left bank a second waterfall appears where the route of flowing water continues on as a dry path. Two travelers, one young and one old, trek up the mountain. Pines and gnarled conifers surround a monastery on the right bank and three monks stand at the shore. Several trees to the left of the monastery interrupt the river’s flow, where once again water intersects with rock so that the river becomes a quiet stream. Behind the monastery, two travelers on horseback round the corner on a second mountain trail. At the scroll’s bottom left corner, conifers and pines command the most attention and here there is a contrast between trees that stand upright and trees that bend over. Behind the trees is a raised pavilion on an island and a small footbridge which links the island to shore. None of the major motifs in “Countless Peaks and Vales” exist in fixed states. Water flows through the veins of rocks and around the base of mountains as boats skim along its surface. Plants grow in crevices and people meander along paths. Various motifs coexist seamlessly, while various permutations of rock, water, trees and people create a broad range of compositional possibilities.

1. Villages
2. Fishers
3. Travelers
4. Scholars

1.4 Scattered throughout the painting are motifs that repeat in pairs. There are two villages, two pairs of fishermen, two groups of travelers and two groups of scholars.
Among the variety, there is a strong sense of unity in “Countless Peaks and Vales.” The exact and focused placement of each element depends upon a counterpart so that each element has its rightful place in relation to the other elements. As such, Wang’s painting resists visual fragmentation and expresses unity. Overall, the painting tells the story of mountains that stretch far into the distance and of a river that is packed with charming vignettes along its shores. And yet, if one considers only one-half or one-fifth of the overall work, another story unfolds. From the bottom-most section, a scholar and his two pupils stand at the head of a bridge. Both students carry supplies, while their teacher points his staff towards a place across the water. Directly behind them, a stream appears, its water rushing towards the quiet bay. A large rock screens the trio’s destination – the pavilion, although one assumes that there are stairs leading up to the top. A boat heads away from the shore, as reeds and trees sway towards the right. The bending plants thus show that the oarsman is rowing against a headwind. Two people rest in the pavilion, perhaps waiting for their friend. One man gazes at the peaks in the distance, while the other admires the rocks before him. The story continues its progression, moving from right to left. The bridge suggests both a path and a destination and while the upward gaze of the scholar extends the scene beyond his immediate context, the wind resists the fishers’ efforts of moving upstream. These motifs do not follow the usual conventions of scale and distance. Objects vary in size and level of detail, even if positioned in the same zone on the scroll. The trees in front of and behind the small pavilion are significantly larger. In this way, Wang Hui seamlessly relates one condition to another. Although the lower section is but a fragment of the overall painting, there is nonetheless a complete story.
1.6 The Whole and the Fragments. The subject is a river gorge, with mountain peaks that extend far beyond the horizon. There are fishermen in the water and men climbing the mountain’s circuitous routes. There are people in pavilions and at shore, simply enjoying the scenery. Wherever there is movement upwards, there is also movement downwards.

1. Two waterfalls and a small rapids are in focus. Travelers ascend the mountain, while water flows down the mountain.

2. The large peak is offset by a wide rushing river. A village, a monastery complex and a pavilion are in focus, placed successively one above the other. The fishermen paddle upstream, the scholar in the pavilion gazes at the mountain, and the monk looks down the riverbank.

3. A variety of trees grow on this mountain and the opposing shores. The scholar and travelers climb the mountain via paths.
1.7 Five Horizontal Fragments. “Countless Peaks and Vales” resists fragmentation.
1. The rock cliffs point up while the calligraphy is written down.
2. The peaks point up and extends outward while the tree line is most visible further down the mountain.
3. Waterfalls cascade, while the traveler and fishermen are heading upward.
4. Both the monk’s gaze and the water’s flow are directed at the bottom, while the travelers ascend.
5. The water flows downward, while the fishermen and a scholar’s gazes are pointed at the top of the scroll.
The representation of variety and unity has great significance in Chinese art. Chinese aesthetics is rooted in Daoism and nature is a popular subject in Chinese painting. Not only does nature, or ziran, represent all elements of the natural world, it also means “of itself.” As such, the natural world is self-generating: it is a matrix of elements that interact to cause change. This matrix also has its rhythm, a constant flux which passes between active and passive states. The Daoist believed that every object, animate or inanimate, possesses qualities “of itself.” True wisdom is that which recognizes and follows the flows of nature’s rhythms and then leaves things as they are. There is no distinction between natural and artificial or between large and small. In the same way, landscape painting and garden design use this rhythm in their organization of space. The Chinese garden, for example, is a world of artifice, but all elements, nonetheless, follow natural processes. It is also a tightly organized journey, where a small space expands by mere suggestion and the sense of place is framed as an accumulation of experience. The garden expresses a narrative, as its serpentine path reveals each scene in continuous progression. Well-designed gardens control both pace and view. Professor Chen Congzhou of Tongji University divides Chinese garden design in two categories: those intended for “in-position viewing,” and those intended for “in-motion viewing.” “In-position viewing” situates the viewer at a platform or pavilion in order to admire a scene in elevation. “In-motion viewing,” on the other hand, anticipates the viewer’s promenade along narrow paths that thread their way between rockery and buildings. Curving paths can disorient the viewer and hide important settings and destinations from view. Furthermore, all the elements used in the garden act as suggestive forms. Rock sculptures remind the visitor of majestic mountains, while ponds and streams represent lakes and rivers. One element becomes suggestive of the other because both belong under the same cosmology. The end of the journey marks a point of reminiscence for the visitor, a point where the accumulation of scenery suggests the natural landscape “of itself.” For the artist, visual or spatial accuracy is not important, whereas the expression of natural rhythms and the spirit of the subject are essential. According to this representation of the natural world, brush art captures vitality in the painted form by using technique and strategic composition.

Shi (勢) is an ambiguous term that means both “position” and “potential.” It thus represents the rules and the effect caused by these same rules. The two definitions are intertwined, since things arranged in a specific position generate a potentiality. In The Propensity of Thing, Francois Jullien uses the dual meaning of shi to argue that Chinese logic is never formed a priori. A sinologist and philosophy professor at the Université Paris VII Denis-Diderot, Jullien writes:

When compared with the elaboration of Western thought, the originality of the Chinese lies in their indifference to any notion of a telos, a final end for things, for they sought to interpret reality solely on the basis of itself, from the perspective of a single logic inherent in the actual processes in motion.⁵ The originality, according to Jullien, stems from the fact that no configuration of forms is perfectly static; rather, all actions require form to take effect. In other words, Chinese artists and poets “produced a particular configuration of the dynamism inherent in reality.”⁶ Following this notion of dynamism, calligraphy, painting and poetry all tell stories in parallel, simultaneously describing the present as the events unfold.

---

6. ibid, 75
Position

Boundary
1.9 The Character Guang showing the Shi in Stroke Order
Position: This stroke “grounds” the character on the page and projects the direction of the following counterstroke.
Boundary: These strokes define the limits of all strokes for the character.
In fill: The remaining strokes that then complete the character.

1.10 (Over) For compound characters, the pattern position-boundary-in fill repeats until the character is completed.
1.11 (Opposite), Partial of Huang Ting Jing
1.12 The Balance of Stroke Direction. In each character, a line projecting in one direction is met by another line projecting in the opposite direction.
1.13 The Exchange of Balance. The shape and positioning of an existing character affects the size, shape and placement of the subsequent characters.
<table>
<thead>
<tr>
<th>黄庭</th>
<th>黄庭</th>
<th>黄庭经</th>
<th>上黄庭经</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.14 The Exchange of Balance. A stroke may throw a character off-balance, but the counterstroke found in the same word or the subsequent word returns the composition back to equilibrium.
1.15 Opposition. Qing is the aesthetic opposite of feng. The strokes of qing contrast the appearance and positioning of feng.
Chinese paintings and calligraphy are not on permanent display, as they use delicate materials such as silk or paper. Instead, they are kept in storage and brought out for viewing. The paper comes from a bamboo pulp that can be cut into separate sheets or made into a roll. Once the painting is finished, the artist mounts it over a linking paper and coats it with a paste that waterproofs the surface. The scroll exists in two formats: the handscroll and the hanging scroll. Handscrolls are horizontal compositions, typically nine to fourteen inches high with variable widths. To view a handscroll, one begins from the right-hand side and unrolls the painting, one shoulder-width section at a time, a rhythmic action which requires re-rolling one section before moving on to the next. Hanging scrolls, in contrast, are vertical compositions that range between two to six feet high with variable widths. A hanging scroll is suspended from a cord at the top and viewed after the painting is hung.\textsuperscript{7} Jullien describes the logic behind this format as follows:

In contrast to Western logic, which is panoramic, Chinese logic is like that of a possible journey in stages that are lined together. The field of thought is not defined and contained \textit{a priori}; it just unfolds progressively, from one stage to the next, becoming more fertile along the way. Furthermore, the path along which it unfolds does not exclude other possibilities—which may run alongside temporarily or intersect with it. By the end of the journey, an experience has been lived through, a landscape has been sketched in.\textsuperscript{8}

The scroll format encourages continuous narratives and even the process of creating the scrolls follows this logic. The artist completes the work in stages. With long scrolls, the painter composes each section separately and then assembles them to create the completed work. There is little interest in boundaries here, as motifs in one scene might extend beyond their context and move towards and into neighbouring sections. There are also no visual breaks. Instead, scenes combine so as to never disrupt the pace or tempo of the overall work. Because of this, great paintings can sustain multiple viewings, for the scenes always reveal new surprises. Viewing itself follows the logic of lived experience to which Jullien refers. While the first viewing establishes the overall narrative, subsequent viewings reveal finer subplots. As a result, the main characters,

\begin{footnotes}
\item[8] Jullien, 124.
\end{footnotes}
motifs, paths and journeys come into contact with minor characters and alternative routes. Likewise, through the process of viewing, the viewer comes into contact with a physical sense of time that is marked out by the act of rolling and unrolling. The scroll format invites this kind of kinetic interaction.

Change is a fundamental part of Chinese landscape painting, since it uses the precise assemblage of forms to express movement. There are rarely straight lines in a Chinese landscape painting. Even architecture cannot escape the influence of curves and dynamic composition. Straight columns support sweeping roofs that, in return, mirror the motion of currents and streams that are never far from the scene. Curved lines best illustrate organic forms—the lines are serpentine, rarely limited to a single arc. Chinese painters impart life to their subjects using a strategy that Jullien calls “functional bipolarity.” From opposition comes desired effect. In this way, the curve is the opposite of the straight edge, but the combination of contrasting qualities creates a tension that is visually dynamic. For example, undulating lines represent a cascade, but on every line an arc springs from a common point, in alternating directions, facing left and right. The resultant effect describes both the motion of the water and the structure that causes the movement. In other words, the rock gives shape and direction to the flow of the water and the water animates the rock. It is this combination of angular and smooth edges, and alternating orientation, that creates the sense of movement. The straight elements are structural, while the curved elements are suggestive of life. Another way artists create visual dynamism is by combining and repeating similar motifs. Guo Hsi, a painter from the Song Dynasty, writes:

The change of appearance caused by the varying degree of distance from the object is figuratively known as ‘the change of shape with every step one takes’. ... Thus a single mountain combines in itself several thousand appearances.  

The repetition of elements in a painting is significant here, since the scattering of trees, rocks, bodies of water, boats, villages and people carries with it a unified logic of dynamism. Like “a single mountain” that unites “several thousand appearances,” views of the same object, at various distances and on different levels of detail, collapse together on one picture plane. Moreover, suggests Jullien, a painter may group “pines, cedars, old acacias, and old juniper trees in clumps of three or five, in such a way as

---

9. ibid, 13.
Every tree possesses a *shi* that expresses its propensity for developing a unique form. Indeed, closer inspection and direct comparison reveal obvious differences in shape, height and posture. Differences create harmony, not dissonance. Ultimately, *shi* is a unifying force, “for in China, a painting is only really worthy of its name when it represents the totality of things.”\(^\text{12}\) *Shi* is a term that represents the vital energy, a natural logic that shapes form and propels change in all objects, whether animate or inanimate. “Functional bipolarity” and variation are artistic devices that enable the viewer to perceive the vital energy—a life force in the painted form. To that end, the artist stays true to the essence of his subject and furthers a unifying quality, without simply replicating elements in the painting.

---

1. Jullien, 82.
2. ibid, 98.
Repeating Gestures. Rivers, streams and mountain paths follow the same serpentine route. The tree trunks are all cranked left and right. Mountain peaks and tree canopies follow the same arc and valleys and rock crevices all resemble a "v."
Opposition. Distance and scale are related but independent. In Chinese landscape painting, distance is a product of comparison between one large and one small motif.
1.20 Shifting Sight lines. The point of view changes in each section of the scroll.

1. Elevation view of the summit in close range.
2. Elevation view of the mountain at a distance.
3. Bird’s eye view of the river.
4. Bird’s eye view of the river gorge.
5. Elevation view of the lake.
02: Lessons from Old Masters

The graphic representation of Chinese characters, rather than being truly pictorial, takes a diagrammatic approach which reveals not the outline, but the meaningful structure of its object.

- Shirakawa

2.1 (Opposite) A man writing couplets
2.2 (Over) A timeline of calligraphic style
Fu Hsi "Ox-Tamer"
Creator of Bo Gua

(1600 - 1027 B.C.)
Carved on animal bone

(827 - 788 B.C.)
Invention of Tadpole Script, Bird Script & Tiger Script

Legendary Period
Xia (2100 - 1600 B.C.)
Shang (1600 - 1027 B.C.)
Zhou (1027 - 256 B.C.)
Hsiao Chuan

Chia Ku Wen

Da Chuan

Legendary Period

Xia (2100 - 1600 B.C.)

Shang (1600 - 1027 B.C.)

Zhou (1027 - 256 B.C.)

Qin (221 - 207 B.C.)

Han (206 B.C. - 220 A.D.)

Li Shu

Tsao Shu

Chen Shu

Hsing Shu

(221 - 207 B.C.)
First Standardized Writing
Used for Formal Documents, Official Text

(221 - 207 B.C.)
Brush becomes common writing tool
Shorthand script used by clerics

(45 - 33 B.C.)
Fast writing that drops strokes
Many word may join in one continuous movement

(70 A.D.)
Modified strokes from Li Shu
Written with steady pace

(220 A.D.)
Chen Shu strokes simplified and written at faster speeds
Occasional linkage between characters
1. **Pictograph**
   
   Fu (Broom)
   
   A diagram of a ceremonial broom

2. **Ideogram**
   
   Shang (Up)  Xia (Down)
   
   Words that indicate position or direction

3. **Semantic Combination**
   
   Radical  Radical  Root  Combination
   
   Meat  Stop  Broom  Gui (Return)
   
   寺 + 止 + 寺 = 归

4. **Extended Meaning**
   
   Fu (Broom)  聾  Sao (Clean)  Jin (Soak)
   
   寺 聾 梢 寝

5. **Phonetic Borrowing**
   
   Yi (Righteousness)  义  is a borrowed homophonous of Yi (Meaning)
   
   义

6. **Semantic Phonetic**
   
   Radical  Homophone  Combination
   
   Insect  Yi (Righteousness)  Yi (Ant)
   
   虫 + 义 = 蟋
Linguistics

Linguistically, Chinese words are categorized as one of six types: pictogram, ideogram, semantic combination, extended meaning, phonetic borrowing, and semantic-phonetic combination. Pictograms are literal representations of living things and inanimate objects. The character for “broom” (ji- 帶) is a conventionalized diagram of a ceremonial broom. Ideograms are characters that symbolize an idea or action, since it is possible to discern a disposition from the character’s appearance. The words for “up” (shang- 上) and “down” (xia- 下) show an upward pull and a downward push. New characters can result from an arrangement of pictograms and ideograms. For example, the word for “return” (gui- 歸) is a combination of “broom” (帯), the word “stop” (zhi- 止) and a diagram that represents the meat offering given out before the troops’ departure. In this way, “return” not only describes an action, but also becomes synonymous with ritual. Furthermore, there are groups of characters that have different configurations and pronunciation but share a common semantic root. These words, by extension of a common symbol, also share a similar logic of meaning. When “broom” (帯) is used as a symbolic root, words such as “clean” (sao- 捲) or “soak” (jin- 浸) expand their meaning to describe both the tools used and the ritual context from which they stem. Some characters evolve when the sound of one word is applied to another without consideration for meaning. “Righteousness” (yi- 義) is a homophone of the word for “meaning” (yi- 意). A word relies on one component to indicate sound and another to symbolize meaning. The word “ant” (yi- 蚣) combines “righteousness” (yi- 義), the phonetic root, with a diagram that means insect. Characters in European languages are phonetic symbols, insofar as sound carries meaning. Chinese, on the other hand, condenses sound and meaning into a visual construction. This is of historical significance:

The fact that Chinese characters not only developed from but retained through time their pictorial / diagrammatic forms indicates just how central the element of visual form is in the Chinese character. ¹

Thus the language has retained its visual format. It is important to write correctly and legibly, but historically, it was paramount that one also wrote beautifully.

---

Written Form as Poetry

In his book, *The Chinese Written Character as a Medium for Poetry*, Ernest Fenollosa, a former professor of philosophy at Tokyo University and curator for the Museum of Fine Arts in Boston, uses linguistic analysis to illustrate the poetic potential of Chinese characters. Fenollosa was one of the earliest promoters of Asian art in North America. Ezra Pound, his literary executor, compiled and published the book in 1920, two years after Fenollosa’s death. Fenollosa’s analysis assumes that Chinese is strictly a pictorial language. His methods are not universal, because Chinese symbols trigger both the memory of sound and meaning. However, Fenollosa correctly noted the absence of grammatical separation in Chinese language. He says that “In reading Chinese we do not seem to be juggling mental counters, but to be watching things work out their own fate.”  

2. Meaning evolves through a specific arrangement of words and, as such, poetry describes the relation of things. As Fenollosa explains, “poetic thought works by suggestion, crowding maximum meaning into the single phrase pregnant, charged and luminous from within.”  

3. Metaphor is a device that bridges the visible and tangible with the phenomenal and intangible. Accordingly, great poetry shows, in a concrete manner, the exchanges that occur between things; pictograms themselves act as visible signs of elements interacting. For Fenollosa, “poetic language is always vibrant with fold on fold of overtones and with natural affinities, but in Chinese the visibility of the metaphor tends to raise this quality to its intensest power.”  

4. Chinese language arises from a logic of lived experience and dynamism – the logic of process.

---

3. ibid, 32.
4. ibid, 29.
Ren Jian Ma, Man Sees Horse
In this context, Chinese characters are never sole descriptors of things (nouns) or actions (verbs). Fenollosa writes:

A true noun, an isolated thing, does not exist in nature. Things are only the terminal points, or rather the meeting points, of actions, cross-sections cut through actions, snap-shots. Neither can a pure verb, an abstract motion, be possible in nature. The eye sees noun and verb as one: things in motion, motion in things, and so the Chinese conception tends to represent them.¹

For example, an eye above a pair of legs represents the character “see.” Thus, the act of seeing describes an eye (noun) in movement (verb). In a sentence such as “man sees horse,” “man” is two legs converging to a point, “see” is an eye propped above legs, and “horse” is a head perched on four legs. According to this logic, the man with moving eyes sees the horse. Fenollosa argues that the significant function of a Chinese character reveals itself only when in direct relation to a specific order with other words. This is only possible because a Chinese character is simultaneously an object and a verb – a thing and the thing in action.

¹ ibid, 14.
2.5 Bagua, eight trigrams

2.6 Chia Ku Wen, 1600-1027 B.C.

2.7 Hsiao Chuan, 201-221 B.C.

2.8 Li Shu, 201-221 B.C.

2.9 Tsao Shu, 45 - 33 A.D.

2.10 Chen Shu, 70 A.D.

2.11 Tsing Shu, 220 A.D.
Calligraphic Style

Chinese language developed over a period of 5,000 years and creation myths served as the first documentation of the written form. In the Legendary Period, a time before recorded history, there were three emperors: Fu Hsi, Shen Nung and Huang Ti. Fu Hsi, the “ox-tamer,” created the bagua, more commonly known as “the eight trigrams.” The symbols consist of both continuous and broken lines. Three continuous lines symbolize heaven, three broken lines symbolize earth, and six variations of broken and continuous lines describe wind, water, mountain, thunder, fire, and lake. The trigrams represent more than 1,471 ideas and objects, but there is no concrete evidence that Chinese language was founded on this system. In Chinese Calligraphers and Their Art, the author Chih-Mai Ch’en speculates that the literal representation of objects and ideas preceded abstraction. It is likely that pictograms existed before the bagua. The second emperor, Shen Nung, created a numerical system using knotted string. It is possible that the brush technique of “return” was inspired by knots, but, without proof, these assertions remain conjectures. On the other hand, the third emperor, Huang Ti or the “Yellow Emperor,” is considered the ancestor of the Chinese. While Fu Hsi and Shen Nung are mythical figures, Huang Ti may have actually ruled between 2697-2597 BC. Furthermore, his minister, Ts’ang Chieh, is often credited as the inventor of the first writing system. Ch’en describes how Ts’ang Chieh developed his system:

After studying the celestial bodies and their formations and the natural objects surrounding him, particularly the footprints of birds and animals, he came to realize that things could be told apart by devising different signs to represent them. This story of origins shows an evolution that is an essential part of the history of Chinese calligraphy. And yet, the earliest concrete evidence of a literate culture came from a period between 2205-1766 BC, a period in Chinese history known as the Shang Dynasty. The Shang “Oracle Bones” consist of 100,000 artifacts engraved with pictograms. The writing is arranged vertically, but each word differs in orientation

---

7. ibid, 5.
and size. Collectively, 1,300 characters make up this language, *Chia Ku Wen*, and they reveal a first attempt at pictorial abstraction.\(^8\) A period of disunion followed the Shang Dynasty; this was a time when feudal states and principalities operated independently. Written language, like the state of governance itself, developed in a scattered way until the Qin Dynasty that ruled from 221-207 BC. Under the unified rule of Emperor Qin Shih Huang, a standardized writing system evolved and came into use. All the characters were reconfigured to follow a uniform orientation, size and rectangular shape. This system became the first calligraphic style, known as *Hsiao Chuan*.\(^9\)

---

8. ibid, 15.
9. ibid, 24. Li Ssu, Qin Shih Huang’s minister is credited with the task of consolidating the *Chia Ku Wen* and the writings of *Chin* and *Chou* states.

---

2.12 Hand Positions when Holding the Brush. The palm faces up, the wrist and forearms lifted off the table. One may grasp the staff by the thumb and one, two, three, or all four fingers.

2.13 Brushes are made of bamboo and animal hairs. There is a large variety of sizes and hairs to choose from, but all brushes have a pointed tip.
With the beginning of a new system for writing, the preferred tool changed from a stylus to a brush. Writing *Hsiao Chuan* with a brush took time and patience. The stroke composition was complex, and yet, at the same time, the character needed to have the appearance of a carved line. The process of calligraphic writing hid the tip of the brush inside the stroke so that a new writing instrument was not necessary. In this way, Chinese calligraphy created a new style of writing that suited the flexibility of the brush. *Li Shu* was first used by clerks within Emperor Qin Shih Huang’s court. This style reduced the number of strokes in a word, allowed for fluid brush movements and added emphasis on the points, both entry and exit, in a stroke. When the Han people succeeded Emperor Qin Shih Huang, they adopted *Li Shu* as the official court script. However, because *Li Shu* restricted brush and hand movements, *Tsao Shu* evolved as a script whose characters keep “the basic structure of the character in *Li Shu*, compromise on its formality, allow it to run wild and free, meet the demands of time.”

Since *Tsao shu* traded legibility for speed, it necessitated a compromise in the form of a new style, *Chen Shu*. *Chen Shu* is a culmination of *Hsiao Chuan*, *Li Shu* and *Tsao Shu*: it buries the brush tip inside the stroke and adopts a simplified pictographic form with exaggerated line variation. *Chen Shu* also exploded the Chinese figure into eight stroke types. *Tse*, *lo*, *nu*, *yo*, *tse*, *lueh*, *cho*, and *chih* are aesthetic variations on horizontal, vertical and diagonal lines. *Tse* and *yo* describe the most pleasing ways for writing short strokes, *lo* and *nu* for horizontal and vertical lines, and *tse*, *lueh*, *cho*, *chih* for different kinds of diagonal lines. The word *yong* or “eternity” is comprised of all eight strokes. A manual, titled *The Eight of Laws of Yong*, described the requisite movements needed for each stroke. Today, when a student begins calligraphy training, the first character he or she learns is *yong*. *Chen Shu* is presently the standard Chinese script. The last calligraphic style invented is *Tsing Shu*, a style which in large part resembles *Chen Shu*, but which occasionally links brushstrokes together. Chinese calligraphers today practice the five major styles, *Hsiao Chuan*, *Li Shu*, *Tsao Shu*, *Chen Shu* and *Tsing Shu*.

---

2.14 The paper is made of bamboo pulp and the ink is a mixture of charcoal, resin and water. The paper is water absorbent and strokes appear instantly upon contact with the paper.

10. Ibid, 46.
11. Ibid, 50. Wang Tz’u-Chung, whose life and career are unknown is credited with adapting *Li Shu* into *Chen Shu*. *Chen Shu* came into prominence in the Tang Dynasty and has since been the first script taught to school children.
2.15 Yong (Eternity) written in Chen Shu.
2.16 The stroke order for yong.
A. Yong is classified as a five stroke character. The vertical element is a combination of lo, nu and yo strokes. On the left, the tse and cho strokes are also joined as one element.
B. The order of brush movement.
1. Ts'e (Dian)
2. Lo (Heng)
3. Nu (Shu)
4. Yo (Gou)

A.
B.
C.
D.
E.
The Eight Laws of Yong

Excerpts from Chen Ssu’s 13th century interpretation of The Eight Laws of Yong.

2.17  (Opposite) Strokes: Ts’e, Lo, Nu, Yo

A. Direction
B. Rhythm
C. Intensity
D. Brush Rhythm
E. Brush Movement

1. Ts’e (Dian): Spot, to slant
A shift of balance from the upper left to the lower right direction.
   Why is it not a simple spot or horizontal stroke? Because it has a certain precipitous inclination to the right. This inclination is essential. When the brush is lowered, it first starts to the right, then there is a crouching, a gathering of force and a crushing-down, with an ending somewhat toward the left. 12

2. Lo (Heng): Horizontal stroke, to bridle
Control the brush momentum and gather the terminating force back into the body of the stroke.
   Why is it called lo instead of a simple horizontal? Because it is successfully executed only when power is held in reserve. It has not the weak ending of a simple horizontal, its conclusion is essentially a springing stroke, yo, executed with retrained strength. 13

3. Nu (Shu): Vertical stroke, to strive
Control the brush momentum and gather the terminating force back into the body of the stroke.
   Why is it called nu instead of a simple vertical? Because it has not the appearance of a straight stroke, as it slowly descends, its force tending to the left, and strives with effort toward the goal of the spring. 14

4. Yo (Gou): Hook, to spring
Release the brush force in a swift, controlled upward direction.
   Why is it called yo? Because it grows out of nu stroke, springing out with an effect of climactic finish but of great power in reserve. 15

---

13. ibid, 35.
14. ibid, 36.
15. ibid, 36.
5. Tse (Ti)  6. Cho (Pie)  7. Lueh (Pie)  8. Chih (Na)
Strokes: Tse, Cho, Lueh, Chih

A. Direction
B. Rhythm
C. Intensity
D. Brush Rhythm
E. Brush Movement

5. Tse (Ti): Diagonal stroke from bottom left to upper right, to whip
Release the brush force in controlled upward direction following a slight arc.
Why is it called to whip? Because its progress is one of slightly rising, springing force. 16

7. Lueh (Pie): Long diagonal from upper right to bottom left, to skim
Release the brush force in controlled downward direction following a slight arc.
The head is heavy and the tail light – it skims the surface as it rises slightly in sweeping to the left. 18

6. Cho (Pie): Short diagonal from upper right to bottom left, to peck
Release the brush force in a swift, controlled downward direction.
It is quick, staccato, the movement of a bird pecking, sharp and straight down. 17

8. Chih (Na): Long diagonal from upper left to bottom right, to tear
Controlled downward motion, gradually building brush pressure towards the end of the stroke.
It begins neither slow nor swift, with a vibrant, shaking movement that continues in an expanding downstroke of tearing force. 19

16. ibid, 36.
17. ibid, 36.
18. ibid, 36.
19. ibid, 36.
Balanced
2.19 The nu stroke is the center and the axis of reflection for yong. The remaining strokes must be positioned and proportioned accordingly. The diagonals cannot be too oblique or disproportionately long or short. Otherwise, instead of appearing vigorous, the character simply looks unbalanced.
Balanced
2.20 Stroke weight is also an important consideration. The strokes combined should have a consistent range of variation. Too much ink and the word looks bloated. An oblique "nu" stroke makes the word appear off-balance.
Graphic Design

Several theoretical systems of compositional principles have been developed over the years. All of them share one prerequisite: inscribing the character within an imaginary square and centering it. As the focus of energy of a character, this central point can lie on either the figure (inked part) or the ground (white paper), but preferably located in the central segment (zhonggong) of the imaginary nine-fold square (jiugong ge) that circumscribe the whole character.

- Yuehping Yen

In the fifteenth century A.D., the calligrapher Li Chun wrote an essay titled “The Eighty-Four Laws.”[20] Li determined eighty-four typical situations for creating good form. For each case, Li used four examples, each written by famous calligraphers, showing the types of adjustments necessary when making dynamic but balanced form. Li focused the eight component strokes individually, showing the variety of line spacing, line weight and the trajectory angle. Li also identified four composite character types: left-right, left-middle-right, top-bottom, and top-middle-bottom. The composite type determines each component’s proportion, scale, and position, along with line spacing, line weight, and stroke orientation and adjustments follow as needed. Li’s analysis alternates between the overall appearance of the character and its stroke components. In fact, he observed that many characters look best as simple geometric shapes such as squares, rectangles, trapezoids and circles. Moreover, singular character form and composite character form present different challenges. The integrity of a singular character form often depends on the precise rendering of one dominant stroke, whereas size and spacing, along with line modifications, affect composite character forms.

20. The Eighty-Four Laws listed are translated by the author from 历代书论释译皆书丛帖: 李淳大字结构八十四法, edited by 房弘毅 (北京: 中国书店, 2005). The translation was verified by Li Hua Yang of Tongji University. For the original Chinese text refer to Appendix A.
2.22 Law 1: Sky Covers
The top covers the bottom entirely. In this law, the top is clear and the bottom is turbid.

2.23 Law 2: Ground Carries
The bottom supports the top. In this law, the top is light and the bottom is weighty.

2.24 Law 3: Concede Left
The left side is raised high, while the right side is hung low, if the right side possesses a modest appearance.

2.25 Law 4: Concede Right
The right side dominates, while the left side is suppressed, if at first the left side looks unassuming.
2.26 Law 5: Divide Boundary

Assume that left and right are equal, with neither side yielding, as if they were two people standing side by side.

2.27 Law 6: Even Three

Assume that the center is straight and upright, and made stronger if the left and right greet the middle.

2.28 Law 7: Two Parts

Divide in half, compare lengths, add a little and spare a little.

2.29 Law 8: Three Stops

Divide into three sections, then estimate how far or near the sections are to one another, in order to arrange the stops.
2.30 Law 9: Occupy the Top
The top is broad yet drawn clear, the bottom is narrow yet drawn turbid.

2.31 Law 10: Occupy the Bottom
The bottom is wide yet drawn light, the top is narrow yet drawn heavy.

2.32 Law 11: Occupy the Left
The left side is big yet drawn slender, the right side is small yet drawn thick.

2.33 Law 12: Occupy the Right
The right side is wide yet drawn lean, the left side is narrow yet drawn fat.
2.34 Law 13: Occupy Left-Right

Left and right are lean yet long, the middle is fat yet short.

2.35 Law 14: Occupy Top-Bottom

The top and bottom are wide and slightly flat, the middle is narrow but not long.

2.36 Law 15: Occupy the Center

The center is wide and large, but drawn light, the two ends are narrow and small, but drawn heavy.

2.37 Law 16: Bowing Gou’s

The top possesses a narrow but short gou stroke, the bottom possess a large curve and a long gou stroke.
2.38 Law 17: Four Equal Corners
The upper two corners are level, and the bottom two corners uniform. This law avoids a limp back and bent foot.

2.39 Law 18: Open Two Shoulders
The shoulders open up, and the feet are drawn together. This law avoids straight legs and relieved shoulders.

2.40 Law 19: Draw Evenly
Black and white in pleasant unison.

Law 20: Crisscross
Three parts afraid of obstructing each other.

Similar to law 9
2.41 Law 21: Sparse Arrangement

In Sparse Arrangement, the pie stroke must show; if it does not, then the word appears coy.

2.42 Law 22: Precise

Precise words are drawn tightly, not loosely scattered and wide open.

2.43 Law 23: Hanging Pin

Hanging Pin words do not use Vertical Stroke, because the Vertical Stroke reduces vigour.

2.44 Law 24: Vertical Stroke

Vertical Stroke words do not use Hanging Pin, because the Hanging Pin looks unstable.
2.45 Law 25: Top Leveled

The Top Leveled word is smaller on the left, but never misaligned.

2.46 Law 26: Bottom Leveled

The Bottom Leveled word is smaller on the left, but never out of position.

2.47 Law 27: Top Wide

For the Top Wide word, the bottom cannot be big and only a slight, elongated square is beautiful.

2.48 Law 28: Bottom Wide

For the Bottom Wide word, the top is long and narrow and a short, compressed square is good.
2.49 Law 29: Subtract Na
A na stroke is subtracted, because if it is not, then the dominant na is difficult to see.

2.50 Law 30: Subtract Gou
A gou stroke is subtracted; otherwise, the dominant gou stroke lacks form.

2.51 Law 31: Concede Heng
For Concede Heng, draw a long, yet unburdened, horizontal stroke.

2.52 Law 32: Concede Upright
For Concede Upright, the shu stroke is straight and does not lean.
2.53 Law 33: Reined in Heng
For Reined In Heng, there is no potential, or shi, when the stroke is level.

2.54 Law 34: All leveled
For All Leveled, simultaneously rein in the strokes.

2.55 Law 35: Vertical Po
The po stroke of Vertical Po, only delights in a hidden head and a gathered tail.

2.56 Law 36: Horizontal Po
The po stroke of Horizontal Po first needs an extended neck and broad chest.
2.57 Law 37: Vertical Ge
The ge stroke of Vertical Ge only fears losing strength from bending.

2.58 Law 38: Horizontal Ge
The ge stroke of Horizontal Ge particularly dislikes stiff, straight, flat hooks.

2.59 Law 39: Wrong Foot
The gou stroke of Wrong Foot must envelope two dian strokes.

2.60 Law 40: Prop Up
The pie stroke of Prop Up must intersect at midpoint.
2.61 Law 41: Head

Like 曾, the top is opened and the bottom is closed.

2.62 Law 42: Feet

Like 其, the top is closed but the bottom is opened.

2.63 Law 43: Rectangle

A Rectangular case likes its four sides straight and wide.

2.64 Law 44: Short Rectangle

A Short Rectangle values level and open shoulders.
2.65 Law 45: Build Separate Gou

For Build Separate Gou, the gou stroke is added separately; otherwise, the stroke looks tired and undifferentiated.

2.66 Law 46: Weighty Pie

For Weighty Pie, the pie stroke conveys the curve, not committing the fallacy of looking like a row of teeth.

2.67 Law 47: Assembled Dian

The appropriate orientation of each dian stroke of Assembled Dian does not resemble a row of masonry.

2.68 Law 48: Arrangement of Dian

The dian stroke of Arrangement of Dian uses variation, without resembling scattered chess pieces.
2.69 Law 49: Striving Vertical Gou

A Striving Vertical Gou is not suited for enveloping; otherwise, the word will not look square.

2.70 Law 50: Bounded Gou

A nu or vertical stroke is not suited for a Bounded Gou; if used, the word won't fill out.

2.71 Law 51: Middle Gou

A Middle Gou is beautiful, as it merely relies on an upright disposition.

2.72 Law 52: Ample Gou

For Ample Gou, the most charming disposition inclines towards upright.
2.73 Law 53: Outstretched Gou

An Outstretched Gou aims only for a bent, outstretched form.

2.74 Law 54: Yielding Gou

A Yielding Gou must know its form exists upright, with its extension bent back.

2.75 Law 55: Left Droops

With Left Droops, the right side must not be too long.

2.76 Law 56: Right Hangs Down

With Right Hangs Down, the left side alone is short.
Law 57: Cover Below
For Cover Below, the left and right sides divide equally.

Law 58: Advantage Below
For Advantage Below, the two sides are valued and displayed equally.

2.77 Law 59: Vertical Wan
The wan stroke of Vertical Wan is long, only afraid of resembling a wasp’s waist or a crane’s knee.

2.78 Law 60: Horizontal Wan
The wan stroke of Horizontal Wan dislikes being short, for it is not a crane’s knee or a wasp’s waist.
2.79 Law 61: Vertical Pie
The pie stroke of Vertical Pie especially dreads being short; and yet it worries about resembling a rat’s tail and a bull’s head.

2.80 Law 62: Horizontal Pie
The pie stroke of Horizontal Pie favors being slightly long and is only afraid of resembling a bull’s head and a rat’s tail.

2.81 Law 63: Successive Pie
According to the law of Successive Pie, the lower stroke’s head faces the upper stroke’s chest.

2.82 Law 64: Disperse Water
According to the law of Disperse Water, the bottom stroke’s edge responds to top stroke’s tail.
2.83 Law 65: Fat

Fat words are slightly fat, but not so much that they end up looking bloated.

Law 67: Scant

Scant words by nature are arranged sparsely; hence, use ample, robust strokes.

2.84 Law 66: Thin

Thin words are trim and the form opposes looking dry and weak.

Law 68: Close

Close words are tightly arranged and comfortably outstretched.

Similar to law 21

Similar to law 22
2.85 Law 69: Stack
Stacked words overlap, again and again, but the point of overlap is positioned evenly.

2.86 Law 70: Accumulate
Accumulated words always irregularly complicated and disorderly seek wholeness within the disorder.

2.87 Law 71: Slant
Slanted words incline to one side as appropriate.

2.88 Law 72: Round
Round words naturally like circular enclosure.
2.89 Law 73: Oblique
Despite being Oblique, the word in essence possesses uprightness.

Law 75: Weighty
In a Weighty case, the bottom is necessarily large.

2.90 Law 74: Straight
Straight words are upright; their four corners are not oblique.

Law 76: Side By Side
In a Side By Side case, the right is necessarily wide.

Similar to law 69
Similar to law 12
2.91 Law 77: Long

A Long case primarily dislikes shortness.

2.92 Law 78: Short

A Short case does not seek length.

Law 79: Big

For a Big case, the words are already big, and its components are amassed cleverly.

Law 80: Small

Small cases are small, but value an ample and austere appearance.

Similar to law 70

Similar to law 66
2.93 Law 81: Facing

Although Facing cases greet, hands avoid touching feet.

Law 83: Alone

Alone words are drawn isolated, and only worry about becoming flighty, dry and thin.

2.94 Law 82: Back Away

The Back Away case is already turned around, but the central artery of the word is unobstructed and free flowing.

Law 84: Single

Single cases are alone, slightly weighted, handsome, light and long.

Similar to law 66

Similar to law 77
2.95 Character Arrangements. Depending on the location of each character, the stroke weight and angle of trajectory changes.

2. All three possess a square shape.
3. The horizontal strokes all slant in parallel from the bottom left towards the upper right.
4. The outer strokes are heavier to ground the composition.
2.96 Character Arrangement. For vertical arrangements, all characters align along a common spine.

2. Although “moon” is narrow and long, its width corresponds to the bottom portion of “snow” and the top portion of “flower.”
3. The verticals are upright, and the horizontals are parallel and rotated.
4. The top and bottom strokes are strong to anchor the composition.
2.97 Character Arrangements. Writing in cursive script frees the words from the grid.

1. ‘Flower,’ ‘Snow,’ ‘Moon’ in cursive script
2. All three characters differ in size and shape
3. The stroke trajectory follows a circular path
4. The strokes on the outer edges are stronger to define the circular path and to anchor the composition.
2.98 Character Arrangement. Cursive script arranged vertically.
1. The curved “snow” is contrasted by the angular “moon” and “flower.”
2. “Moon” crosses over to the white space of “flower.”
3. The composition follows an elliptical trajectory defined by “flower,” while “snow” and “moon” act as the central spine.
4. The uppermost and bottommost lines are written heavier.
A Reservoir of Knowledge

The overall appearance of Chinese words has transformed significantly and visibly throughout history. Every change reflects a change in the state of Chinese society. Perhaps, for this reason, calligraphy remains an important cultural treasure. *Calligraphy and Power in Contemporary Chinese Society* is a study that unearths the influence of calligraphy on the average person who lives in contemporary China. Through a series of interviews with calligraphers, scholars and average citizens, the author Yuehping Yen discovered that many people still believe that words embody ancient knowledge. She writes:

> With each change of written form, the characters are conceived to be endowed with new meanings that reflect changes in the socio-cultural environment. As a result, written characters as a whole constitute a fecund reservoir of ancient ideas and a record of social history.  

---


---

2.99 *Qian Zi Wen in Four Scripts*, Wen Cheng Ming.

A. *Hsiao Chuan* words are archaic in appearance, assumes a rectangular shape with rounded edges, the strokes are the same width and an arched horizontal is used repeatedly.

B. *Li Shu* words are simplified and abstract. The words are square shaped and there is stroke variation. *Li Shu* also emphasizes a curved horizontal.
The process that Yen describes is evident when considering the official script of the Qin Dynasty, Hsiao Chuan. For example, the script’s archaic appearance simultaneously alludes to the ancient cultures that invented language, and symbolizes the unification of the Chinese empire. Chinese characters also incorporate information of past calligraphic techniques. As Yen states:

Knowledge of calligraphic techniques helps unravel the hidden messages carried within characters, such as the interplay of structural balance and imbalance, and the meaning of the natural rhythm of things.  

To write Hsiao Chuan, the calligrapher buries the brush tip and applies firm but even pressure to the page. As such, the brush movement mimics the slow motion of chiseling into a hard surface—the brush literally carves into the paper with this motion. Each calligraphic style possesses a unique combination of stroke arrangement, rhythm, pressure and speed, but at no point are the techniques mutually exclusive. In fact, new forms reinvent old techniques. For example, Hsiao Chuan requires a large amount of restraint to hide the flexible nature of the brush, whereas Tsao Shu liberates the brush across the surface of the page. In this way, Hsiao Chuan respects an orderly structure and Tsao Shu is preoccupied with spontaneity. In both cases, however, brush control is paramount. In the former case, control is visible through the uniform line spacing and thickness and in the latter case, control is visible at the pivot point between strokes. Rigid ends are necessary counterpoints to fluid lines in between. The technique that stops the momentum of a moving brush is constant; the differences are in stroke lengths, speed and pressure.

22. ibid, 54.

2.100 Qian Zi Wen in Four Scripts, Wen Cheng Ming,

C. Chen Shu words appear angular, with sharp edges. The shape is square, but varies in size. The horizontal strokes are rotated and parallel.

D. Tsao Shu words are fluid. The words assume a variety of rectangular and square shapes. There is evident variation in stroke weight, and the parallel horizontal lines are interrupted with sharp oblique lines.
Partial of Qian Zi Wen in Four Scripts. Brush rhythm and movement for each style respectively, divided by the number of strokes per character.

A. Hsiao Chuan
B. Li Shu
C. Chen Shu
D. Tsao Shu
2.102 Partial of Qian Zi Wen in Four Scripts. As the character form simplifies, the speed of execution increases as well as the number of rhythmic variations.

A. Hsiao Chuan
B. Li Shu
C. Chen Shu
D. Tsao Shu
2.103  *Hua (Flower) in Five Styles*
2.104 *Hua* in Five Styles. The order of movement for each style respectively. The direction is consistent: from top left to bottom right, moving in a stroke, counterstroke pattern.

A. *Hsiao Chuan*
B. *Li Shu*
C. *Tsao Shu*
D. *Chen Shu*
E. *Tsing Shu*
2.105 *Hua* in Five Styles. Brush rhythm for each style respectively.

A. Uniform pressure, consistent time spent throughout.

B. Highest pressure and longest time spent on the beginning and ends of every stroke.

C. Highest pressure and longest time spent at the top and bottom section. Shortest time spent on middle section.

D. Highest pressure and longest time spent on the beginning and ends of every stroke.

E. Highest pressure and longest time spent at the top and bottom section. Shortest time spent on middle section.
Hua in Cursive Script, in three variations
Another variation on the cursive style, each word is written in one stroke, but the loops and turns are spaced and proportioned differently.

A. The loops are flat and wide and each section is speed evenly.
B. The loops are flat and small, the tightest section being the middle.
C. Narrow at the top and wide at the bottom, the largest loop offsets the off-centered vertical stroke.
A. The most pressure and the longest time the brush is in stasis is at the lower section.
B. The least pressure and the shortest time the brush stops is in the middle section.
C. The most pressure and the longest time the brush remains still is at the top and bottom sections.
03: Dynamics

The ink spreads out and fills the space, but the brush informs and imparts dynamism.
- Francois Jullien

So-called brush technique essentially constitutes a stock of knowledge about correlations between brush movements and calligraphic forms. In other words, it is information about how different motor movements (of the hand or body and the brush) produce different calligraphic results in the form of inked shapes.
- Yuehping Yen

3.1 (Opposite) Writing a horizontal stroke.
Brush Technique

Excerpts from *Calligraphy and Power in Contemporary Chinese Society* by Yuehping Yen.

**Inversions**

In order to write a stroke in accordance with the general direction of movement, one has to hold the brush in a way that it seems to go in the opposite direction \[n\]… the deliberate pursuit of technical inversion creates extra weight and substance to brushstrokes.¹

**Withholding**

*Xu* is to transform an eruptive outpouring energy into a fully controlled reservoir of power, an inconspicuous yet perpetual readiness to act…at every temporary end of an inky trajectory, we expect to see a gesture that resembles the collecting of breath after a flurry of action. In this manner, composure is regained and another discharge of energy can be directed the brush tip without showing the slightest sign of haste. If every stroke is treated as an integrity that leads to another one, then the recollecting and withholding of energy at the end of every stroke ensures a fully prepared start for the ensuing one.²

**Sluggishness**

*Liu* means staying or being kept at the same place. In calligraphy, it implies constant checking as the brush moves along, almost a reluctance to move forward. Here emerges another paradox – intending to move forward while refusing to do so!³

---

² ibid, 88.
³ ibid, 88.
3.2 Sentence Order. Chinese text begins on the upper right hand side and read is from right to left.
3.3 Character Order. Words are written vertically, a new word continues from underneath.
3.4 Stroke Order: Top to Bottom. Start at the top, moving the brush from left to right, burying the brush tip inside the stroke. Repeat the pattern for subsequent strokes underneath.
3.5 Stroke Order: Left to Right. Start at the top, moving the brush from the top down burying the brush tip inside the stroke. Repeat the pattern for subsequent strokes on the right.
3.6 Stroke Order: Alternate. Alternate directions between strokes. If a word begins with a vertical stroke, a horizontal counterstroke follows.
3.7 Stroke Order: Alternate. Alternate directions between strokes. If a word begins with a horizontal stroke, the following stroke is vertical.
3.8 Stroke Order: Inside-Out. Establish the central axis. Fill in the strokes starting from the top left towards the bottom right.
3.9 Stroke Order: Outside-In. Inscribe the word’s boundary. Fill in the strokes starting from the top left towards the bottom right. Finally, close the figure.
3.10 Front, written in Tsing Shu. The front side of calligraphy, especially written in a Tsing Shu or Tsao Shu style show brush trajectory and speed.
3.11 Back, written in Tsing Shu. The back side of calligraphy shows the amount of pressure exerted by the brush on the paper. The longer the brush remains in stasis, the harder the hand pushes, the more ink bleeds through.
3.12 Movement in Section, Qing Feng written in Tsao Shu. The brush moves vertically, in the z-axis in space, pressing into the paper. The paper absorbs the ink proportionately.
A. Ink
B. Paper
3.13 Wu (Nothing) written in Tsao Shu

3.14 (Over) Wu written in Tsao Shu. A study of brush and hand positions in elevation and plan view.
3.15 Zhong (Center): Two Variations on Scale. Brush positioning, rhythm and direction of movement remains constant, regardless of the size of the writing instrument.

1. Stand
2. Thrust
3. Squat
4. Pull
5. Pivot
Pull
Squat
Pivot
Pull
Stand
Calligraphic Space: A Function of Accumulated Time

The brushstroke itself is a potent, reduced form. In The Path of Beauty, Li Zehou, a scholar of aesthetic philosophy, calls Chinese characters “significant forms.” A significant form “incorporates elements of both imagery (generalized simulation), and expressiveness (of emotions).” Li argues that the reader perceives phenomena in the written form. For Li, lines are like music notes and “what one perceives in the lines is not a series of objects in space but rather an epoch in time.” Line connects the motion of the hand, it is a visible record of time passing. A brushstroke channels the strength and fluidity of the writer’s hand and as Li suggests, makes his emotions visible. As a graphic, Chinese letter form simulate objects, actions and sounds, and the brush, injects the life in the form.

Motifs are literal representations: the viewer can easily anticipate cause and effect. When a person is near a bridge this naturally suggests that he will cross it. Landscape painting arranges motifs to create tension and induce the propensity for action. In calligraphy, brushstrokes are the motifs and each stroke carries within it a certain tension that is visible. There is a correlation between hand movement and the brush trace left on the page. As Francois Jullien writes:

The Chinese art of calligraphy can be considered a prime example of dynamism at work within a configuration because, in the case of each ideogram copied, a particular gesture is converted into a form, just as a particular form is equally converted into a gesture. In this schema the figure produced and the movements producing it are equivalent. This schema, as Jullien suggests, embodies the tension inherent in the brushstrokes, for the very fact of their being. To create tension, the calligrapher must also disrupt repeated movements, but always with a strict adherence to the precise rules which exist in calligraphy. Each character is inscribed within and centred on an imaginary square. Unlike Western writing, where movement is unidirectional from left to right,

5. Ibid, 22.
the Chinese calligrapher goes on to build the character stroke by stroke within the imaginary square. The centre of the square marks the axis of reflection, rotation and union. The calligrapher first locates the centre, his initial strokes mark boundaries, followed by lines that are filled in to complete the character. One always begins from top to bottom and completes the left side before the right side. Not one move is repeated successively: a horizontal motion is followed by a vertical or diagonal motion. Every stroke begins and ends in the opposite way of its intended path. Tension is thus initiated by the constant alternation of brush movement. Calligraphy skillfully adjusts character composition, entry, follow-through and exiting of every stroke to appear poised for action. Not surprisingly, water never pools over calligraphy paper. The longer the brush remains still, the larger the ink blots. The faster the brush moves, the less the ink is absorbed by the paper. Since every type of brush movement follows some semblance of a “pause-pull-pause” pattern, ink opacity varies within a line. These variations describe the duration, speed and pressure of the brush in motion. If a line of uniform width is considered one visible unit of time completed at average speed, then important changes—difference in line thickness, ink opacity, and stroke spacing, in comparison—show rhythmic variation. Calligraphy skillfully modulates standard rhythms and speeds. Learning stroke order always precedes developing character recognition. Those versed in Chinese language can detect force, rhythm and speed in calligraphic writing. Those who practice calligraphy are training their sense of timing.

Although good calligraphy demands absolute mastery over motor skills, there are several limiting factors that make every work unique. The calligrapher is forbidden to go back and alter a completed stroke. The brush tip is soft, so that it is impossible to produce a uniform bead of ink across the paper. The paper is handmade, so that every sheet differs in thickness and absorbency. The calligrapher’s state of mind and the physical setting that surrounds him all affect the outcome of the finished work. Sun Qianli’s treatise on calligraphy states:

\[ \ldots \text{Because one writes at a given time, circumstances will provide either discord or } \]
\[ \text{harmony. When there is harmony, the writing flows forth charmingly; when there is } \]
\[ \text{discord, it fades and scatters.} \]

In this way, every line trace is specific to the immediate moment of its creation. With every stroke, the calligrapher imparts a mood or tone that reflects the physical and

---

emotional circumstances surrounding the creation of the work. Chinese characters are significant forms and, as such, they are highly suggestive. Lines can reflect the author’s joys and sorrows. A handscroll titled “Calligraphy in Running and Cursive Script” written by Dong Qichang in the Ming dynasty translates as follows:

> In the third month of the guimaoyear, I was in Suzhou at the Cloud Shadow Mountain Studio. Outside my window it was raining, and I had nothing to do. My friends Fan Erfu, Wang Boming, and Zhao Mansheng dropped by to visit. We sampled some Tiger Hill tea and ground [some fresh] Korean ink. Then I tried out a new brush, writing with abandon and all quite at random.  

The first section, “In the third month of the guimaoyear, I was in Suzhou at the Cloud Shadow Mountain Studio. Outside my window it was raining, and I had nothing to do. My friends Fan Erfu, Wang Boming, and Zhao Mansheng” is written in Tsing Shu. Tsing Shu is characterized by simplified characters and occasional linkages between strokes. The words in the passage are generally uniform in size and spacing. The line work follows a consistent range of thicknesses. Horizontal strokes are parallel to each other, while vertical lines maintain a sense of uprightness. In the second section, “dropped by to visit. We sampled some Tiger Hill tea and ground [some fresh] Korean ink. Then I tried out a new brush, writing,” all the characters are larger, and a few columns were filled by only one word. The author no longer follows the rules of periodic uniform spacing and every character is composed of more loops and swirls. At times an entire column of characters is written with one continuous line. The third part reads: “with abandon and all quite at random.” All characters are reduced to gestures. The brush is dry, and each line is written with haste. Writing “with abandon” suggests the least restraint in brush work, the freest use of paper space, and the most reduced attention to character legibility. Most importantly, the transformations explained through the story complement the execution. While the handscroll is a record of an ordinary event, the gradual conversion of the lines imparts fresh imagery to the content.

Another example of this significance of forms is the story of Wang Xizhi’s masterpiece “Lan Ting Shu” or the “Orchid Pavilion Preface.” In the spring of 353 AD, Wang Xizhi, the sage of calligraphy, and forty of his friends gathered at Lan Ting, near Shaoxing.

---

According to Wang Hsi-chih [Xizhi], the place was surrounded by lofty mountains and steep slopes, lush forests and bamboo groves, with a clear brook gushing through, giving reflections to the left and the right. It was a fine day in early Spring. The air was clear and the breeze was soft. After a few rounds of drinks, Wang Hsi-chih [Xizhi] composed an essay commemorating the occasion which he wrote down ‘on paper made of the silk cocoon with a brush made of mouse-whiskers.  

The piece is praised for Wang’s skilful combination of power and variation. “The character ‘zhi (a preposition, meaning ‘of’) appears twenty times but not two of them are identical.”10 “Lan Ting Shu” was subsequently copied by numerous accomplished calligraphers. Wang himself rewrote the piece several times. However, none could compare to the original. Beautiful scenery, great company, joyous spirit, an experienced hand— all of these elements culminated in an instant surge of inspiration that is evident in the form and arrangement of characters. Such conditions could not be recreated. That is why the original is valued above all other versions.

10. Yen, 97.
Calligraphy incorporates another dimension – time. Out of respect for historical significance, technique changes according to the chosen style. The essence of brilliant writing is the calligrapher’s control of timing. Rhythm is a measure of ruptures in a unit of time. Musical rhythms are written as beats within a section of time. Brush technique is rhythmic, the general pattern is pause, pull, pause and repeat. In calligraphy, the beats are rendered as dots on a line. Lines and dots are visual counters, combined they create graphic interest and show the passing of time at various speeds. Because calligraphy values honest reflection of good technique and no stroke is ever reworked; there is a transparency between the gesture and the resultant form. A moment of inspiration can elevate the significance of technique. Every piece is unique. Chinese calligraphy is not only a way of recording images, it is a way of telling time.
The scroll reads from right to left; the script transforms from running script (Tsing Shu) to wild cursive script (Tsao Shu). The expressed form corresponds with the mood conveyed by the content.
Conclusion

Paper represents the troops arrayed for battle; the writing brush, sword and shield; ink represents the soldier’s armour; the ink slab, a city’s wall and moat; while the writer’s ability is the chief commander.

-Wang Xizhi
Chinese calligraphy is pattern recognition: each word is a symbol of meaning and movement. Those who admire calligraphy enjoy the art for its content and for how it is technically executed. The changes in line weight represent a passage of time. The prose draws an imaginative space, the brushstrokes construct a graphic space, and the visible variation of line reveals the rhythm of movement over a time. The brush adds a vertical dimension to writing, and the brushstroke is a two-dimensioned trace of movement in three axes. The brushes accentuates and aestheticizes the dynamic sequences.

Since Mao's revolution, Pinyin has been a part of Chinese education. Pinyin – Mandarin Chinese written with Roman characters – is a phonetic system that preserves the graphic character of written Chinese in the age of automation.¹ The typist makes the pictograph by typing the appropriate symbol for a particular sound.

There are over 50,000 words in the Chinese language and a literate person uses around 3,500 everyday.² Traditionally, students learned vocabulary by reciting and writing words. Memorization was inevitable, and the regular use of the words reinforced the memory of them. The keyboard however, has altered the relationship between the mind, the eye, the ear and the hand. The article “中国书法要救亡.” (Chinese Writing Needs Saving) in the June 15, 2008 issue of the North American-based Chinese periodical Ming Pao Daily News reported that school children in China, when asked to handwrite a word from memory, executed poorly. Their handwriting was messy; many students did not know stroke order, and some left out important strokes. The article suggested that typing circumvents the rules for recording Chinese. The current generation is forgetting a basic skill of the language itself. ³

Whereas Pinyin was introduced a half century ago and word processing is a popular communications tool in the last decade, handwriting, more specifically calligraphy is a skill that was developed and practiced for over two millennia.

Calligraphy is an education in itself, an art that combines rules and intuition. The art of the line uses the Four Treasures of a Scholar’s Study: the brush, the paper, the ink and the ink stone. The brush is the recording device which uses paper for preserving and exhibiting the recorded information; the ink is the medium and the ink stone helps prepare the medium.

For over 2000 years Chinese writing has been recorded with a brush. Tsuen-hsuin Tsien, the author of Written on Bamboo and Silk; the Beginning of Chinese Books and Inscriptions, observed that brushes were discovered on archeological sites dating back as far as the 1600 B.C., when oracle bones were made, but the general Meng T’ien, in the third century B.C. was credited for making the first brush. The chisel, the stylus, and the brush coexisted in history, but by the Qin Dynasty in the third century B.C., brushes became the most popular writing tool.

Paper was invented in the second century A.D. by Ts’ai Lun. This achievement, mentioned in the official history of 25-189 A.D., the T’ung-kuan Han-chi, stated Ts’ai Lun’s motives for inventing paper as making a material less cumbersome than bamboo tablets and less expensive than silk. “He initiated the idea of making paper from tree bark, old rags, and fishing nets.” Paper catalyzed the propagation of written texts, and after the fourth century A.D., “Paper has been in use everywhere.”

The ink stone is a well and a mill; the calligrapher grinds an ink stick (compacted charcoal powder) while he adds water. There isn’t a prescribed formula for mixing ink. If the mixture is viscous, the brushstroke risks looking dry, and if the mixture is dilute, the brushstroke risks looking bloated. Experience is the only measure, one knows when the proportion is right by the smell of soot coming from the mixture and the oily sheen on the surface.

Mastery over the four treasures is at the basis of Chinese arts and literate culture.

---

6. ibid, 138.
The calligrapher Wang Xizhi once said, “paper represents the troops arrayed for battle; the writing brush, sword and shield; ink represents the soldier’s armour; the ink slab, a city’s wall and moat; while the writer’s ability is the chief commander.” To win in battle, the commander deploys each part tactfully, but the skill of maneuvering brushes, paper, and ink in the fight for beauty is difficult to master. Brush writing is an unnatural exercise: the arm is raised and level with the table, fingers pinch the brush shaft, and the hand is at right angles to the arm. With the brush, the calligrapher must maintain consistent surface contact while conveying a sense of rigidity in a fluid medium. Brushing a line, the hand moves in a rhythmic pattern in two kinds of movement: the broad sweep and the pause; they occur in succession. The calligrapher anchors the brushstroke with dots by initially pressing the brush down, and then pulls the brush across the page to make the line before pressing down again to make a final dot. This way of brushing a line place emphasis on controlling the “up and down” movement of the instrument while it moves across the page. A brushstroke becomes a topographic map of the force and the speed of the hand; the harder one pushes down, the more ink is deposited at that moment.

To complicate matters, the lines of a Chinese word are added in a circuitous fashion. The “structure” of a character form depends on the stroke order of that word, the order that prescribes a way of moving. Stroke order prevents continuous motion in one direction. With this disruption of movement, the hand returns to a vertical position at the start of each new stroke. The brush distributes ink evenly from the vertical position, and from this point it is easy for the hand to pivot in any direction.

Calligraphy is ruled by the tools, the materials, the styles, the brush-hand positions, the basic techniques, the stroke types and the stroke order, but the most brilliant pieces have been done by individuals on the edge of control, with minds oscillating between consciousness and delirium. Their well-trained hands still moved precisely, but guided by emotions rather than reason. In short, brush technique is not the subject, it is the vessel that helps channel everything else into a visual format.

There are no shortcuts to mask a calligrapher’s inexperience. One cannot plan spontaneity. Juggling aesthetic and kinetic factors in the moment of writing takes a lifetime to master. A calligrapher is at the mercy of time. By all accounts, Chinese writing and calligraphy should be extinct.

Every notable poet and painter was an excellent calligrapher.

What does a future hold for a practice that is the antithesis of speed and consistency?

Historically, good calligraphers were civil servants. Until the twentieth century, the Chinese imperial system was controlled of a class of ruling civil servants and the Civil Service was the most respected profession. Mandarin is the official Chinese dialect, and it was once known as Guanyu, or the language of officials. The Oxford English Dictionary defines Mandarin as “a form of Chinese language formerly used by officials and educated people,” and as, “an official in any senior grades of the former imperial Chinese civil service.” A Mandarin was a high official who entered public service by passing a series of exams, the Jinshi exams. The candidates were tested on their knowledge of the Five Confucian Classics, the Four Books, and the Six Scholastic Arts, and the Jinshi exams were open to anyone. Successful candidates usually came from the upper class, those who had the means to hire tutors. Although only a handful of people from obscure backgrounds ever rose to this position, it was literacy, not social class, that represented the ticket to social mobility. In the examination room, armed with a brush, everyone was equal. The Mandarin title was a reward for the candidate's scholastic efforts, and there was a presumption that those who prevailed would be intelligent, moral magistrates.

The tradition endures culturally, if not in practice. A literate person has wenhua: “text transformed.” Text is a vehicle for individual transformation. Writing imparts knowledge; the mind acquires the intelligence to discipline the body. Training

---


9. Yuehping Yen. Calligraphy and Power in Contemporary Chinese Society. (New York: RoutledgeCurzon, 2005), 44. The character Hua (change) is often paired with a noun, in this case Wen (text). This composition indicates a transformation towards the state of literacy.
in calligraphy asks that the student to check his pride and assume his teacher’s hand, tracing, copying his master’s calligraphy, and over time, learning how the image corresponds to the motion of the hand. Calligraphy requires a clear head, a steady hand, and a calm heart; practice (perhaps by definition, tedious) is indeed tedious and frustrating; many students abandon the craft. Historically, the rewards for prevailing were a title of distinction and a better life. Presently, the reasons for continuing are not as clear, although every Chinese official knows how to write at least one slogan or phrase with a brush. It is a popular Chinese belief that learning calligraphy cultivates diligence, humility and patience, and that the written form is a true indicator of character.

In stories of calligraphy, personality is said to be mirrored in the letterform Yanti, a variation on the Standard style (Chen Shu) was invented by Yan Zhengqing. Yan Zhengqing was a loyal civil servant of the Tang Dynasty. His brushstrokes are weighted, his words are uniform in size and arranged in a perfect grid. Yanti is unwavering and stable, which perfectly complemented Yan’s personality.10

Slender Gold was a style of calligraphy invented during the Song Dynasty by the Emperor Huizong.11 The emperor’s handwriting was light, whimsical, and delicate. Huizong was famous for investing in the arts and neglecting his army. Huizong abdicated the throne and brought on the fall of the Song Dynasty. Handwriting analysis may reveal certain truths but more importantly, the stories describe Chinese values. The examples warn against self-indulgence and they support a balanced education; calligraphy teaches various lessons on balance. At every stage of a calligraphy lesson, from preparing the materials to executing the product, the student is cultivating his awareness of the edge. But, whether the ink is too thick or a vertical stroke is crooked, he learns the skills (materially and visually) that will restore balance.

According to professor Lothar Ledderose of the University of Heidelberg, a written language needs to meet two requirements: first, the script reflects speech, and then, second, it is easy to learn, read and write. Ledderose believes that Chinese script meets his terms because it is a repeatable modular system. For him, the written form is a hierarchy of “elements,” “modules” and “units.”12 The element is a brushstroke, the

10. ibid, 68.
module is a semantic component, and the unit is a single character. Ninety percent of Chinese words are combinations of semantic modules and many words share the same component, often called a radical. With enough vocabulary, one can guess at the meaning and sound of an unfamiliar word based on the pattern of symbolic combination.

The appearance of Chinese script has changed significantly. The language has been standardized many times. The most recent debate is whether Simplified Script is really easier to learn. Simplified Script (a program that began in the 1950s when the government hoped to promote literacy by making Chinese writing less complicated) is taught and used today in mainland China. Strokes were subtracted from words, and many letter forms were reconstituted based on phonetic similarity. In The New York Times Room for Debate Blog on May 2, 2009, Eileen Cheng-yin Chow and Hsuan Meng both believed that the decision was a political statement; school children in Hong Kong and Taiwan, where the program is not enforced, boast some of the highest literacy levels in the world, and experience no difficulty in learning the Traditional Script. Chow, an associate professor of Chinese literary and cultural studies at Harvard University, argues that Simplified Script purges the language of variation, subtlety and wit, and Meng, a columnist for the World Journal Weekly feels that it is difficult to fully understand historical texts without knowing traditional writing. On the other hand, as the language evolves, the Simplified form is considered by Chow as one natural outcome. Building a case for Simplified Script, Professor Eugene Wang at Harvard University observed that, “The running- and cursive -hand in traditional Chinese calligraphy is a radically simplified form.” And in one important way at least – stroke order – the form is less significant than the practice.

In many respects stroke order is the active link between the old and new letter forms. The memory of a word is as much about how one writes it as it is about how the word is recognized. All Chinese writing follow stroke order. They are also the rules that keep a calligrapher’s timing. The Cursive script was present when Hsiang Chuan was the official script. The Simplified script is largely based on the cursive hand.


The route of movement for the hand remains constant, regardless of the style. Of all the visual components that were lost, the space inscribed by movement is, in most cases, preserved.

Brush writing’s endurance is a testament to its efficiency. Calligraphy’s distinctive reputation may, in the end, save the craft. Mao Zedong, during the Cultural Revolution, protected calligraphy above the other traditional arts. The title of official newspaper for the Communist Party - The People’s Daily, was written by Mao in cursive hand.  

Calligraphers today are still highly regarded, not simply because the skill takes a long time to cultivate, but because the art is timeless. Writing that is two thousand years old still looks and feels current. Brush writing is an integral part of Chinese iconography, and as a culturally distinct art, calligraphy is attracting new audiences in the West. This western interest renews the tradition.

In calligraphy, I found a two-dimensional art that communicates depth without perspective, but I was most pleased as I discovered the time of calligraphy. While the drawn word – the character – is two dimensioned, the word itself describes four. Not only is there a figure and a ground, a body and a void, but there is also an account of force, of speed, and of the passage of time. The moving hand inscribes a physical space, as it draws the brush through three axes. The written Chinese character remains a code inscribed in motion.

With many reforms, the Chinese language is still a graphic system. The tools have changed and the people have adapted new techniques for recording this graphic form. The keyboard and computer software are again changing the way Chinese people are recording their language. Although calligraphy is not essential for education, handwriting is absolutely necessary. One truly knows Chinese when he can recognize the word, use it in context, and write it by hand. The word is truly committed to memory when the body and the mind both remember it.

15: Yen, 2.
Notes

General

All Chinese terms are italicized, except for proper names of people, historic periods and dynasties. Chinese terms are written in English using Pinyin romanization. Quotations from Chih-mai Chen and Lucy Driscoll that include Chinese terms use the Wade-Giles romanization.
Appendix A

Li Chun’s 84 Laws:

All English translations are by the author and verified by Li Hua Yang of the Department of Art Design at Tongji University. Diagrams were not drawn for Laws 20, 57, 58, 67, 68, 75, 76, 79, 80, 83, 84 because the graphic effect is similar to and may be represented by another law. “Crane’s knees,” “rat’s tail,” “bull’s head” and “wasp’s waist” are descriptions of bad stroke form mentioned from law 59 to 62. The original Chinese text is listed below.

1. 天覆：要上面盖尽下面，法宜上清而下浊。
2. 地载：要下而载起上画，法宜上轻而下重。
3. 让左：须左昂而右低，若右边有谦逊之象。
4. 让右：宜右耸而左平，若左边有固逊之仪。
5. 分疆：取左右平而无让，如两人并相立之形。
6. 三匀：取中间正而勿偏，若左右致拱揖之状。
7. 二段：要分为两半，较其长短，微加饶减。
8. 三停：要分为三截，量其疏密，以布均停。
9. 上占地步：要上面阔而画清，下面窄而画浊。
10. 下占地步：要下面宽而画轻，上面窄而画重。
11. 左占地步：要左边大而画细，右边小而画粗。
12. 右占地步：要右边宽而画瘦，左边窄而画肥。
13. 左右占地步：要左右瘦而俱长，中间肥而独短。
14. 上下占地步：要上下宽而微扁，中间窄而勿长。
15. 中占地步：要中间宽大而画轻，两头窄小而画重。
16. 俯仰勾：要上盖窄小而钩短，下腕宽大而钩长。
17. 平四角：要上两角平，而下两角齐，法忌挫肩垂脚。
18. 开两肩：要上两肩开，而下两脚合，法忌直脚卸肩。
19. 匀画：黑白喜得均匀。
20. 错综：三部怕成犯碍。

159
21. 疏排：疏排之撇须展，不展则寒乞孤穷。
22. 緡密：緡密之画用蹙，不蹙则緡宽开散。
23. 悬针：悬针之字，不用中竖，若中竖，则少精神。
24. 中竖：中坚之字，不用悬针。若悬针，则字不稳重。
25. 上平：上平者，其小者在左，而莫错方隅。
26. 下平：下平者，其小者在左，而勿差地位。
27. 上宽：上宽者，下面固然难大，惟长趁而方佳。
28. 下宽：下宽者，上面已呈成尖，用短蹙而方好。
29. 减捺：减捺者宜减，不减则重捺难观。
30. 减钩：减钩者宜减，不减则重钩无体。
31. 让横：让横者，取横画长而勿担。
32. 让直：让直者，要直竖正而勿偏。
33. 横勒：横勒者，但放平而无势。
34. 均平：均平者，若兼勒以先威。
35. 纵波：纵波之波，惟喜藏头收尾。
36. 横波：横波之波，先须拓颈宽胸。
37. 纵戈：纵戈之戈，但怕弯曲力败。
38. 横戈：横戈之戈，尤嫌挺直钩平。
39. 屈脚：屈脚之钩，须要尖包两点。
40. 承上：承上之撇，宜令叉对正中。
41. 兽头：兽头者，用上开而下合。
42. 其脚：其脚者，用上合而下开。
43. 长方：长方者，喜四直而宽大。
44. 短方：短方者，贵两肩而平开。
45. 搭钩：搭钩者，钩须另搭，不则累苟笔之态。
46. 重撇：重撇者，撇须宛转，不则犯排牙之名。
47. 攒点：攒点之点，皆宜朝向，不则为砌石之样。
48. 排点：排点之点，须用变更，不则为布棋之形。
49. 勾努：勾努之字，不宜用裹，若用裹，字便不方圆。
50. 勾裹：勾裹之字，不宜用努，若用努，字最难饱满。
51. 中勾：中勾之字，但凭偏正生妍。
52. 绰勾：绰勾之字，亦喜妍生偏正。
53. 伸勾：伸勾之字，惟在屈伸取体。
54. 曲勾：曲勾之字，要体立曲伸。
55. 左垂：左垂者，右边不得太长。
56. 右垂：右垂者，左边须紧要短。
57. 盖下：盖下者，左右宜均分。
58. 趁下：趁下者，两边贵乎平展。
59. 纵腕：纵腕之腕宜长，惟怕蜂腰鹤膝。
60. 横腕：横腕之腕嫌短，不宜鹤膝蜂腰。
61. 纵撇：纵撇之撇最忌短，仍患鼠尾牛头。
62. 横撇：横撇之撇偏长，惟怕牛头鼠尾。
63. 联撇：联撇之法，取下撇之首对上撇之胸。
64. 散水：散水之法，下点之锋应在上点之尾。
65. 肥：肥者止许略肥，而莫至于浮肿。
66. 瘦：瘦者但须少瘦，而体反为枯瘠。
67. 疏：疏本稀排，乃用丰肥粗壮。
68. 密：密虽紧布，还宜自在安舒。
69. 堆：堆者，累累重叠，宜重叠处以铺匀。
70. 积：积者，总总繁芜，用繁芜中而取整。
71. 偏：偏者还须偏称。
72. 圆：圆者则喜围圆。
73. 斜：斜者虽斜，而其中要取方正。
74. 正：正者已正，而四方无使余偏。
75. 重：重者下必要大。
76. 并：并者右必用宽。
77. 长：长者原不喜短。
78. 短：短者切勿求长。
79. 大：大者既大，而妙于攒簇。
80. 小：小者虽小，而贵在丰严。
81. 向：向者虽迎，而手足亦须回避。
82. 背：背者固扭，而脉络自贯通。
83. 孤：孤者画孤，而惟患于轻浮枯瘦。
84. 单：单者形单，而偏重于俊丽清长。
Bibliography

Architecture, Calligraphy


Theory


 twentieth century. The empire's fall and the rapid socialist and market reforms that followed in the 1970s and 1980s enabled calligraphy to flourish in new configurations that were determined by the new conditions of rapid urbanization, the rise of the market economy, and the rise of new forms of education. In the late twentieth century, calligraphy was transformed into an art, while in the early twenty-first century, it was transformed into an illusion.
Journals, Periodicals


Graphics


Muybridge, Eadweard. Human Figure in Motion. New York: Dover, 1955.


Internet Sources


