Letter, Musical Pitch, and Color in the Work of Paul Foster Case
Alison Deadman

Summary

In his published works, the author of esoteric books and founder of the occult society The Builders of the Adytum, Paul Foster Case, makes references to and gives examples of a system that correlates color, musical pitches, and the letters of the Hebrew alphabet; however, nowhere in his available writing does he explain why these particular colors, pitches, and letters belong together. By analyzing Case’s correspondences and piecing together the various hints that he gives about them, this article demonstrates that he was using a systematic application of a logical theory that has at its root the division of the Hebrew alphabet into mother, double and single letters; the division of the color spectrum into primary, secondary, and tertiary colors; and the division of the musical scale into twelve equal half-steps. This article suggests a logical derivation for the system Case used to correlate each letter of the Hebrew alphabet with both color and pitch.

The Sepher Yetzirah

The Sepher Yetzirah is a short book (between 1,300 and 2,500 words, depending on which version one consults) that, as Aryeh Kaplan explains, “Is without question the oldest and most mysterious of all Kabbalistic texts.” References to the Sepher Yetzirah date back as early as the first century C.E., but the origins and authorship are not known and most likely date back before the first century references.

The Sepher Yetzirah does not assign colors or musical pitches to the Hebrew letters. It is rather concerned with examining the mystical aspects of the 22 letters of the Hebrew alphabet, which it divides into three groups: Three mother letters (Aleph, Mem, Shin, etc.).

Introduction

Paul Foster Case (1884-1954) in his The Tarot: A Key to the Wisdom of the Ages assigns each Tarot card (or “key” as he terms them) of the major arcana to one of the 22 letters of the Hebrew alphabet, to a particular musical pitch, and to a specific color. In the Tarot deck he designed the assigned color provides an external frame for the pictorial glyph, and the appropriate letter of the Hebrew alphabet is printed in the lower right-hand corner of each key. Case does not explain the colors and pitches, nor does he elaborate on how they are derived or assigned to specific keys. The only hint that he gives is in the chapter entitled “Construction of the Tarot” where he tells us enigmatically that:

In addition to the clues afforded by the numbers and titles of the major trumps, or Keys, and by the associations of ideas suggested by the letter-names, we find others derived from certain traditional occult interpretations of the Hebrew letters. These are given in an ancient volume of Qabalistic wisdom. The name of the book is the Sepher Yetzirah, or Book of Formation. From it are taken all occult attributions of the Hebrew alphabet given herein, with the exception of the attributions of the sun, moon and planets to the seven letters technically known as “doubles,” because each of them has a hard and a soft pronunciation.

About the Author

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seven double letters (Beth, ב; Gimel, ג; Daleth, ד; Peh, פ; Resh, ר; and Tav, ת); and twelve single letters (Heh, ה; Vav, ו; Zain, ז; Cheth, צ; Teth, ת; Yod, י; Lamed, ל; Nun, צ; Samekh, ש; Ayin, ע; Tzaddi, ת; and Qoph, ק). The Sepher Yetzirah also seems to create a mystical cube from the letters, assigning each to an edge (single letters), a face (six of the double letters), an internal dimension (mother letters) or the central point (the remaining double letter, Tav) on the so-called “cube of space.” Case makes mention of this cube in The Tarot, but only briefly; he provides a diagram indicating the position on the cube assigned to each of the 22 Keys of the Tarot and thus each of the 22 letters of the Hebrew alphabet, but tells his readers that “No more than hints of this cube symbolism can be given in this introductory text, but we have thought best to include the figure of the Cube of Space, since careful study will reveal to discerning readers many clues to a deeper understanding of the Tarot symbolism.” Few authors have written about this diagram or its meaning. David Allen Hulse gives a summary of the symbolism of a cube in his New Dimensions for the Cube of Space saying that:

To Plato, this simple shape represented the element of earth. To every initiated Mason, the cube is the ultimate symbol for the soul, polished and shaped by constant spiritual work. In the emblematic language of alchemy, the cube is the body, whereas the sphere is the spirit.

The Cube of Space, like the better-known Qabalistic diagram, the Tree of Life, can be interpreted as a map of the soul’s journey toward unity with the Divine. The three-dimensional nature of the Cube makes it the more complex of the two glyphs and perhaps this is the reason that so little has been written about it.

The combination of geometry, sound, and number (Hebrew letters are also number-symbols) that is found within the Sepher Yetzirah was fundamental to both the Pythagorean and Hebraic traditions.

### Table 1. Associations between Tarot Keys and Hebrew Letters

<table>
<thead>
<tr>
<th>Key</th>
<th>Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. The Fool</td>
<td>Aleph</td>
</tr>
<tr>
<td>1. The Magician</td>
<td>Beth</td>
</tr>
<tr>
<td>2. The High Priestess</td>
<td>Gimel</td>
</tr>
<tr>
<td>3. The Empress</td>
<td>Daleth</td>
</tr>
<tr>
<td>4. The Emperor</td>
<td>Heh</td>
</tr>
<tr>
<td>5. The Hierophant</td>
<td>Vav</td>
</tr>
<tr>
<td>6. The Lovers</td>
<td>Zain</td>
</tr>
<tr>
<td>7. The Charriot</td>
<td>Cheth</td>
</tr>
<tr>
<td>8. Strength</td>
<td>Teth</td>
</tr>
<tr>
<td>9. The Hermit</td>
<td>Yod</td>
</tr>
<tr>
<td>10. The Wheel of Fortune</td>
<td>Kaph</td>
</tr>
<tr>
<td>11. Justice</td>
<td>Lamed</td>
</tr>
<tr>
<td>12. The Hanged Man</td>
<td>Mem</td>
</tr>
<tr>
<td>13. Death</td>
<td>Nun</td>
</tr>
<tr>
<td>14. Temperance</td>
<td>Samekh</td>
</tr>
<tr>
<td>15. The Devil</td>
<td>Ayin</td>
</tr>
<tr>
<td>16. The Tower</td>
<td>Peh</td>
</tr>
<tr>
<td>17. The Star</td>
<td>Tzaddi</td>
</tr>
<tr>
<td>18. The Moon</td>
<td>Qoph</td>
</tr>
<tr>
<td>19. The Sun</td>
<td>Resh</td>
</tr>
<tr>
<td>20. Judgment</td>
<td>Shin</td>
</tr>
<tr>
<td>21. The World</td>
<td>Tav</td>
</tr>
</tbody>
</table>

### The Major Arcana and the Hebrew Alphabet

In the “Introduction” to The Tarot, Case suggests that the Tarot originated around 1200 C.E. but dates the modern revival of interest in it as an esoteric science (rather than an exoteric parlor game) to Eliphas Levi’s Dogma et Rituel de la Haute Magie of 1854. Quoting Levi, he makes clear that the Tarot is “an erudite Kabalistic book,” and states that it makes use of “the relatively simple system of num-

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bers and letters afforded by the Qabalah, or Secret Wisdom of Israel.”

The scheme that Case uses to relate the Hebrew alphabet to the major arcana of the Tarot is identical with that used by the occult society known as The Golden Dawn. Case had been a member of this society from 1918-1922, and as such had sworn an oath not to reveal any of their teachings; however, he had been studying the Tarot long before joining the Golden Dawn. In the 1919 preface to his Introduction to the Study of Tarot, Case says of the attributions of the Hebrew letters “I worked out this system some twelve years ago.” He makes clear in The Tarot when discussing his attribution of the seven planets to the seven double letters, which were also identical to the system espoused by the Golden Dawn, that he did not consider he was breaking any oath by revealing things that he had worked out on his own prior to his involvement with the Golden Dawn. Table 1 illustrates the Hebrew letters associated with each key of the major arcan. The name of each Hebrew letter is also a word in its own right, and Case uses these words to help elucidate the meaning of the associated Tarot key, for example he says of Key 12, The Hanged Man/Mem:

Mem… Its name means literally “seas,” but, like many plurals in Hebrew, it designates a general idea, in this instance, “water.” In this connection we may note that alchemists call water “the mother, seed, and root of all minerals.” Water, the element represented by Mem, is the first mirror. Water reflects images upside down, and this idea is carried out by the symbolism and title of Key 12, which is a symbol of reflected life, of life in image, of life in the forms taken by the occult “water,” or cosmic substance.

Letter-Color Associations: Moina Mathers and the Golden Dawn Color Scales

Towards the end of The Tarot, Case makes reference to the Qabalistic Tree of Life. This glyph consists of ten circles or sephirot connected by 22 paths. Case states:

The teaching of the Golden Dawn included the Qabalistic Tree of Life. The Golden Dawn was founded in 1888 by a group of three Masons, William Wynn Wescott, William Robert Woodman, and Samuel Liddell “MacGregor” Mathers. The first initiate of the society was Mina Bergson who would later marry MacGregor Mathers and take the name Moina Mathers. She had significant clairvoyant skills and was a trained artist of Jewish descent. It is Moina who is credited with creating the four color-scales of the Golden Dawn. Each color-scale represents one of the four Qabalistic worlds and it was the so-called King-scale, associated with Atziluth (the archetypal world, the world of the God-force or Deity) that was assigned to the paths of the Tree of Life. Ta-
ble 2 compares the Golden Dawn King Scale (as recorded by Israel Regardie) with Case’s system. The reader should note that the paths on the Tree of Life are numbered 11-32 (numbers 1-10 being assigned the ten sephiroth).

The similarities will be immediately clear, especially if one is prepared to equate orange-yellow with amber and green with emerald green. The only points at which the two color-scales diverge significantly are: the slight difference for path 19 (Key 8, Teth) where the Golden Dawn scale lists greenish-yellow and Case has simply yellow; and path 31 where the Golden Dawn scale shows scarlet-orange and Case simplifies it to scarlet. I will suggest in the discussion that follows that Case’s system is different in these places for very specific reasons.

**Color-Pitch Associations:**

**Edward Maryon and the Marcotone system**

As someone who began his career as a professional musician, it is perhaps not surprising that musical pitch was important to Case. A typescript document from 1922 entitled *The Life-Power* written by Case makes clear that he is drawing on the work of Edward Maryon (1867-1954) for his pitch-color associations. Maryon’s book *Marcotone: The Science of Tone-Color* expounds his theory of a correlation between musical pitches and color in a didactic format. In a 1905 article, Maryon makes clear his view that the vibratory natures of both light and sound have a spiritual source saying:

> Is not Man’s truest expression in song? Are not all the suns of all the Universes qualified by the power of their chantings? Yes, for Svara, the Great Breath, source of all Vibration, as motion in waves of sound or light, embodies all things in Cosmos, it is God’s embodied Will.

Maryon believed that most people could bring to mind a particular color with accuracy but not a particular pitch. By working with ratios of light to sound waves, Maryon came up with specific color equivalencies for each of the 12 pitches of the chromatic scale (employing primary, secondary and tertiary colors). His educational goal was to teach the student to associate color and pitch; that is to develop “absolute pitch”—the ability to sing or recognize a specified pitch at will, without reference to any external sound. Maryon believed that:

> When Marcotone has become a natural possession, acquired through the common educational system of the people, a new epoch will have come. The characteristic feature of this epoch will be, that the *Divine Cosmical Idea* will then be expressed, as the *Practical Work of Human Endeavor*.

**The Mother Letters**

The Sepher Yetzirah assigns the three mother letters to the internal dimensions of the cube of space and Case assigns each letter a color/pitch pair: Aleph (pale, light yellow/E) connects the upper face to the lower face; Shin (scarlet/C) connects North and South faces, while Mem (pale blue/G-sharp) connects East and West faces of the cube. If you refer to Table 2 you will note that in Moina Mathers’ King-scale the mother letters are assigned colors that are intense—bright pale yellow, deep blue, glowing scarlet-orange. Case removes the intensity, but includes modifiers for both Aleph (clear, pale yellow) and Mem (pale blue), but not for any of the other letters, thus the color for Shin (scarlet) has no modifier associated with it.

The three mother letters are also associated with three of the four esoteric elements. Shin is associated with the element of fire, and so it seems logical that of his three colors Case should choose scarlet, likewise Mem is associated with water, and pale blue would seem to be the obvious color. This leaves the element of air and the color clear, pale yellow. Figure 1 shows the chromatic scale inscribed around a circle. One can see immediately that the three pitches Case assigns to the mother letters divide the chromatic octave and the color wheel exactly into three equal portions. I suggest that this is the reason he changed the Golden Dawn scarlet-orange to plain scarlet. The three letters here create what a musician would call an aug-
Table 2. Comparison of the Golden Dawn King-Scale and Case’s Color Scale.

<table>
<thead>
<tr>
<th>Path</th>
<th>Case</th>
<th>Golden Dawn King-Scale</th>
<th>Letter</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Clear Pale Yellow</td>
<td>Bright Pale Yellow</td>
<td>Aleph</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Beth</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Blue</td>
<td>Blue</td>
<td>Gimmel</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Green</td>
<td>Emerald Green</td>
<td>Daleth</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Scarlet</td>
<td>Scarlet</td>
<td>Heh</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>Red-Orange</td>
<td>Red Orange</td>
<td>Vav</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>Orange</td>
<td>Orange</td>
<td>Zain</td>
<td>6</td>
</tr>
<tr>
<td>18</td>
<td>Orange-Yellow</td>
<td>Amber</td>
<td>Chayth</td>
<td>7</td>
</tr>
<tr>
<td>19</td>
<td>Yellow</td>
<td>Greenish-Yellow</td>
<td>Teth</td>
<td>8</td>
</tr>
<tr>
<td>20</td>
<td>Yellow-Green</td>
<td>Yellowish-Green</td>
<td>Yod</td>
<td>9</td>
</tr>
<tr>
<td>21</td>
<td>Violet</td>
<td>Violet</td>
<td>Kaph</td>
<td>10</td>
</tr>
<tr>
<td>22</td>
<td>Green</td>
<td>Emerald Green</td>
<td>Lamed</td>
<td>11</td>
</tr>
<tr>
<td>23</td>
<td>Pale Blue</td>
<td>Deep Blue</td>
<td>Mem</td>
<td>12</td>
</tr>
<tr>
<td>24</td>
<td>Blue-Green</td>
<td>Green Blue</td>
<td>Nun</td>
<td>13</td>
</tr>
<tr>
<td>25</td>
<td>Blue</td>
<td>Blue</td>
<td>Samekh</td>
<td>14</td>
</tr>
<tr>
<td>26</td>
<td>Indigo/Blue-Violet</td>
<td>Indigo</td>
<td>Ayin</td>
<td>15</td>
</tr>
<tr>
<td>27</td>
<td>Scarlet</td>
<td>Scarlet</td>
<td>Peh</td>
<td>16</td>
</tr>
<tr>
<td>28</td>
<td>Violet</td>
<td>Violet</td>
<td>Tzaddi</td>
<td>17</td>
</tr>
<tr>
<td>29</td>
<td>Violet-Red</td>
<td>Ultra Violet Crimson</td>
<td>Qoph</td>
<td>18</td>
</tr>
<tr>
<td>30</td>
<td>Orange</td>
<td>Orange</td>
<td>Resh</td>
<td>19</td>
</tr>
<tr>
<td>31</td>
<td>Scarlet</td>
<td>Glowing Scarlet-Orange</td>
<td>Shin</td>
<td>20</td>
</tr>
<tr>
<td>32</td>
<td>Indigo/Blue-Violet</td>
<td>Indigo</td>
<td>Tav</td>
<td>21</td>
</tr>
</tbody>
</table>

The three primary colors are the only three colors of light that the human eye is capable of registering. All other colors that we perceive are formed of mixtures of these three colors. Why is there no reference to the fourth element, earth? Case provides the answer when he tells us that the cube “is a symbol that from the time of Pythagoras has been associated with the earth,” so the cube itself provides the fourth element.

**The Double Letters**

There are seven double letters, which both Case and Moina Mathers assign to the seven colors of the light spectrum (scarlet, orange, yellow, green, blue, indigo, and violet) and Case adds their associated pitches. These colors are the three primary colors (scarlet, yellow, and blue) the three secondary colors (orange, green and violet) and one tertiary color (indigo). The identification of seven colors in the light spectrum is in some ways arbitrary, as there are no clear

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All of the double letters but one are assigned by the *Sepher Yetzirah* to the faces of the cube of space. Case and Moina Mathers take the remaining double letter, Tav (which the *Sepher Yetzirah* assigns to the center of the cube), and associate it with the only tertiary color in the light spectrum, indigo, and thus the pitch A. The other six double letters are: Beth assigned to the upper face (E/Yellow);
Gimmel, the lower face (G-sharp/blue); Daleth, the Eastern face (F-sharp/green); Kaph, the Western face (A-sharp/violet); Peh, the North face (C/scarlet); and Resh the Southern face (D/orange). These pitches and colors are illustrated in Figure 2 where you will notice that they divide the color wheel and the chromatic octave equally into six parts (creating what musicians call a whole-tone scale). Careful examination of this whole-tone scale reveals a close connection with the mother letters. You will see that there are twice as many faces to the cube (six faces) as there were internal dimensions (three dimensions). In the same way that each mother letter is assigned to one of three elements, each of the double letters is assigned to one of the seven planets (Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn). The planet most closely associated with fire—the fiery energy of Mars (the letter Peh), is assigned to the same pitch/color (C/scarlet) as the letter Shin. Likewise the letter/planet combination most closely associated with water (Gimmel/Moon) is assigned the same pitch/color (G-sharp/blue) as had the mother letter Mem (water) and the letter/planet combination most closely associated with air (Beth/Mercury) the same pitch/color (E/yellow) as had the mother letter Aleph (air). The pitches for the other three planets are formed by inserting three pitches/colors (D/orange, F-sharp/green, and A-sharp/violet) exactly in-between those of the existing triad.

The Single Letters

The twelve single letters of the alphabet are assigned to the twelve edges of the Cube of Space and are associated with the twelve signs of the zodiac as shown in Table 3. The number of single letters/edges to the cube (twelve) is double that of the number of faces to the cube (six). One can see from Table 3 that Case has taken the signs of the zodiac in usual order beginning with Aries and assigned them to the ascending chromatic scale/color wheel, starting with the pitch/color C/scarlet. When compared with Moina Mathers’ King-scale, the letter Teth is the only one that is significantly different in Case’s system (see Table 1). If Case had used “greenish-yellow” which presumably equates with “yellow-green” he would have had two single letters with the same color/pitch and there would not be a letter assigned to the color/pitch yellow/E. Case’s system for single letters is illustrated in Figure 3.

Conclusion

The foregoing discussion has shown that the correspondences between Hebrew letters, colors, and pitches in Case’s work are based on a systematic application of a logical theory that has at its root the division of the Hebrew alphabet into mother, double and single letters; the division of the color spectrum into primary, secondary and tertiary colors; and the division of the musical scale into twelve equal half-steps.
and color, you will be able to get in conscious touch with a limitless store of energy.\textsuperscript{33}

He also makes a similar statement in \textit{The Tarot}, where he suggests: “If you will look at something yellow, and intone the note E-natural before you begin to look at Key 1, you will intensify the evocative effect of that Key.”\textsuperscript{34}

In part two of \textit{The True and Invisible Rosicrucian Order}, Case discusses the ten Rosicrucian Grades, which are stages in the soul’s journey toward Unity or true self-knowledge. Case spells out significant words associated with

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
Pitch & Letter & Edge of Cube & Color & Zodiacal Sign \\
\hline
C & Heh & North-East & Scarlet & Aries \\
C-sharp & Vau & South-East & Red-Orange & Taurus \\
D & Zain & East-Above & Orange & Gemini \\
D-sharp & Cheth & East-Below & Orange-Yellow & Cancer \\
E & Teth & North-Above & Yellow & Leo \\
F & Yod & North-Below & Yellow-Green & Virgo \\
F-sharp & Lamed & North-West & Green & Libra \\
G & Nun & South-West & Blue-Green & Scorpio \\
G-sharp & Samekh & West-Above & Blue & Sagittarius \\
A & Ayin & West-Below & Blue-Violet/ Indigo & Capricorn \\
A-sharp & Tzaddi & South-Above & Violet & Aquarius \\
B & Qoph & South-Below & Red-Violet & Pisces \\
\hline
\end{tabular}
\caption{Table 3. Single Letters}
\end{table}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure3.png}
\caption{Figure 3. Single Letters: Primary, Secondary and Tertiary Colors: Chromatic Scale}
\end{figure}
each grade, for example Tahoor meaning “purified” and spelled Teth, Heh, Vav, Resh for the second grade of Theoricus (which is the grade “in which one learns the underlying theory that will be applied in subsequent practice”). Case uses the Tarot keys assigned to each letter of the word in question (for Tahoor: Strength, The Emperor, The Hierophant, and The Sun) to elucidate significant teachings associated with the grade being discussed. By so doing, he invokes the power of the Hebrew letter and the associated color (which forms the frame to the keys of his Tarot deck) but makes no mention of the musical pitches; however, based on the above quotations from The Life-Power and The Tarot, one can only assume that Case in his own work also invoked the pitches of each letter as a tool to connect with the teachings encapsulated in each Tarot key.

1 I am grateful to Marianne Gubler and Joseph R. Lee for reading early drafts of this work and providing encouragement and helpful suggestions.
3 This deck was drawn by Jessie Burns Parke under the supervision of Paul Foster Case and is the deck published by the organization Case founded, the Builders of the Adytum (B.O.T.A.).
4 Case, The Tarot, p. 18.
6 Kaplan, Sefer Yetzirah, p. ix. Note the various spellings of “Qabalah” and “Qabalistic.”
7 The transliteration of the Hebrew letters in this discussion will use the spellings given by Case in The Tarot.
8 Case, The Tarot, p. 68.
9 David Allen Hulse, New Dimensions for the Cube of Space: The Path of Initiation Revealed by the Tarot upon the Qabalistic Cube, York Beach, ME: Samuel Weiser, Inc., 2000, p. 3.
10 See Leonora Leet, The Secret Doctrine of the Kabbalah: Recovering the Key to Hebraic Sa-
12 Translated into English by A. E. Waite and published in England by Rider and Co. in 1896.
14 Ibid.
16 Case’s resignation from the Golden Dawn in 1922 is well documented, as is his entry to the Second Order (who were concerned with practical rather than theoretical matters) in 1920; however, the date at which he joined the Outer Order (whose focus was largely theoretical) is less well documented. The date of 1918 is suggested by Lee Moffitt in his Biographical Timeline of Paul Foster Case [http://www.2000biz.com/pfc/documents/timeline.pdf accessed 8-22-05] posted as part of the Paul Foster Case Online Study Resource—formerly associated with B.O.T.A.
17 Paul Foster Case, Introduction to the Study of Tarot, New York, 1920, p. 3.
18 Case, The Tarot, p. 19. The preface to the first revised edition of this work claims the date 1907 for the year in which Case worked out Hebrew letter-Tarot key correspondences.
20 Ibid, p. 211.
21 She had studied art at the Slade School of Art in London but put her artistic career on one side when she married Mathers, to devote both her artistic and clairvoyant talents to Mathers’ work and the Golden Dawn. For a discussion of the little that is known of her life, see Mary K. Greer, Women of the Golden Dawn: Rebels and Priestesses, Rochester, VT: Park Street Press, 1995.
22 For a succinct explanation of the four Qabalistic worlds, see Case, The Tarot, pp. 3-5.

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Interestingly, Case changes the names Maryon uses for two colors, he calls A “Indigo” as well as “blue-violet” and he inverts Maryon’s “Green-Blue” for the pitch G, calling it “Blue-Green.”


Case is working with an equal tempered chromatic scale where the note G-sharp is identical to that of A-flat. For ease here, only one of these two enharmonic names will be given, and I have arbitrarily chosen to use the “sharp” names.


