# *Makam* and Beyond: A Unified Theory in Julien Jalâl Ed-Dine Weiss's Last Composition

# Stefan Pohlit

THE French *kanun* player Julien Jalâl Ed-Dine Weiss (1953–2015) is remembered as an acclaimed virtuoso of *makam* music on the international stage. In the early 1980s, he became a student of Munir Bashir, moved to Aleppo, and founded the traditional *taĥt ensemble* Al-Kindi, famous for its interpretations of the historic repertoire. During the last decade of his life, he resided in Istanbul, concentrating on Ottoman court music.

Weiss, one of the first modern performers to harness the ritual *sema* of the *Mevlevi* order, often collaborated with Sufi singers and even converted to Islam. In his theoretical effort, however, he was driven less by divine initiation than by his fascination for acoustic science. Weiss believed that the Middle Eastern tradition should not be taught in conservatories but through oral, individual instruction. On the one hand, he felt dissatisfied with the Westernizing influence of twelve-tone equal temperament; on the other, due to his unique perspective as a foreigner, he experienced the modal system with its many local variations as a compound, transnational phenomenon. His tuning system for the *kanun* (Pohlit 2012) is noteworthy as the attempt of a practicing musician to reconcile theory with the diversity of performance culture.

Despite his intention to unite the divergent tuning customs of Turkey and many local sub-traditions in the Arab world, Weiss's effort never gained a following. Even in Erdoğan's Turkey, he was perceived both as an "Arab" and as a Westerner who deserved no place in Istanbul's legacy. After his death in 2015, most of his instruments were either lost due to the Syrian war or stolen.<sup>1</sup> The situation appears yet more unfortunate with regard to his written output: his abundant collection of transcriptions in his own notation has never been catalogued and remains unpublished. Even lesser known are his compositions in which he experimented with his theory. The following commentary explores Weiss's last work, Spiritual Journey/Sinfonia Sacra, completed in 2014 partly with my assistance. In this ambitious score, Weiss extended the concept of monophonic modality into Iran and India and enriched his style by borrowing from the two-mallet technique of the Persian hammered dulcimer, santūr. Due to Weiss's quite creative treatment of historical makam species, it seems difficult to provide a conclusive assessment of its importance. Weiss's major invention may be the periodic cells with which he assembled his large form-concept, relying on universal principles, such as symmetry and rhythmic cycles. Comparable to a Schenkerian model of foreground-background relationships, Spiritual Journey points toward a generalization of the concept of *seyir* (i.e., the linear progression of an unfolding *makam*) in what I call a "unified

I. In 2016, through my procuration, one single specimen was eventually retrieved and sent to an archive in Berlin.

theory." A full reproduction is provided as appendix, completed by myself from Weiss's handwriting by May 2011. We continued to work on additional movements and minor revisions until June 2014. Weiss also consulted me when choosing the score's final name with the subtitle "sinfonia sacra."

#### THEORETICAL FOUNDATION

The century-old discrepancy between *makam* theory and practice must have been an important topic in Weiss's career since its early stages. In 1985, Jean During, a close friend of his, published a sonographic analysis of selected modes which During had recorded with masters of the Iranian *radif*. During (1985, 118) stated that a limitation of the general scale to the common 17 notes would not encompass various effects of expressivity (such as vibrato and portamento), but that the results gave evidence of agreement on a basic, homogenic system. Jean-Claude Chabrier, Weiss's instructor during the 1970s, in turn questioned the validity of historical treatises in practice: had popular performers ever comprehended the reasoning behind al-Farābī's and Ṣāfī al-Dīn's arithmetic systems, or had they not rather obtained their pitches by means of empirical string division in the manner of Manṣūr Zalzal from the eighth century (Chabrier 2001, 610)?

Major Turkish theorists, such as Hüseyin Sadettin Arel ([1968] 1991), Gültekin Oransay (1957), M. Ekrem Karadeniz ([1965] 2013), and Yalçın Tura (1988) were aware of this gap, exhausting themselves with defending various Pythagorean/comma systems in order to restore what they deemed an obstructed heritage. Arel's 24-note scale, a curious amalgamation of commas and Western temperament, has often been taunted for its misrepresentation of certain notes, such as the low second degree of genre uşşak. Oransay was the first to raise the number of pitches from 24 to 29 notes per octave. Karadeniz chose 41 notes, and the trend in more recent approaches leads towards full chromaticism in order to transpose any given scale identically onto any pitch. At a board meeting in May 2011, the Istanbul State Conservatory of Turkish Music added a simple equal-tempered 48-note system to its curriculum. This approach, submitted by Nail Yavuzoğlu (2008), has been criticized by Ozan Yarman (2009), a graduate of the same institution, because it ignores the traditional function of commas, limmas, and diatonic intervals by transforming them into eighths of a tone. Yarman suggests a 79-note tempered grid, drawing on several historical references (2008). However, neither system has been recognized by performers. It seems likely that tradition as collective expression cannot be modified by intellectual effort alone, and Arel's 24-note scale remains the standard Turkish method of notation.

Weiss's source material was more diversified because he was trained by Arabs but performed on a Turkish *qānūn*. Pitches tuned as quartertones in the Arab world are only a comma lower than their upper neighbors in Turkey. The tradition of Aleppo was further distinguished by its high quartertone halfway between general-Arab and Turkish standard. Until the 1970s, Aleppian luthiers used to built a special *qānūn* model specifically applied to local demand. When Weiss arrived in Aleppo, this instrument had already vanished; however, he had been introduced to it by Jean-Claude Chabrier in Paris and would later refer to it as a major inspiration to his own tuning system (Weiss and Pohlit 2014, 209–11).

Obsessed with mathematics, Weiss believed that any musical interval could be explained by the simplest corresponding ratio, even if this demanded complex fractions. Around 1990, he constructed a *qānūn* in just intonation and abandoned the constraint to place scale degrees within the nomenclature of a single general gamut (Pohlit 2012). Weiss's gānūn contains up to fourteen movable tuning levers ('urāb [Arab.] or mandal-s [Turk.], respectively) on each course of strings, dividing two adjacent Pythagorean semitones (or apotomes;  $2187/2048 \approx 113.69c$ ) into one Zarlino semitone (i.e., the distance between a minor and a major harmonic third,  $25/24 \approx 70.67c$  [Goldman 1991, 166]) and two syntonic commas (81/80  $\approx 21.51c$ ) on either sides of it. The Zarlino semitone is further divided to obtain four Zalzalian intervals (i.e., quartertones of different sizes, referring to the empirical approach of the Abbasid lutist Manşūr Zalzal al-Dārib [Touma 1998, 32]). On position Re-3 of Table I, which shows Weiss's first *qānūn* tuning system, this division provides Ibn Ṣīna's low neutral second (13/12, 138.57c), on Re-4 the common Arab three-quarter tone (12/11, 150.63c), on Re-5 a higher three-quarter tone for the Aleppian tradition (II/IO, I65.00C). Table I shows Weiss's most common tuning system. Weiss's other tuning systems only differ in regard to these inner notes, but most of them were never realized. Two models disposed of an additional lower octave, extending the qānūn's range onto DI.

Weiss tuned A4 (the *perde neva*) to pitch standard 440 Hertz. In contrast to Turkish and Arab standard notation, the *perde rast* is thus positioned at D4. Accidentals and key signatures are represented using Weiss's symbols (see Table 1), interval sizes occasionally measured in ratios and cent (c) equivalents.<sup>2</sup> With the exception of Weiss's specific spelling for indicating his own invented *usul* cycles, musical terms of Turkish-Ottoman music are written consistent with the standard rules outlined by the Turkish Language Association.

#### **DEVELOPMENT OF SPIRITUAL JOURNEY**

Weiss began composing *Spiritual Journey* during a period when his concert schedule was relatively empty, while he was recruiting new musicians to his Al-Kindi Ensemble, now based in Istanbul. The completion took Weiss several years because, as he stated, he could only engage in it when he felt sufficiently relaxed. Besides classical Ottoman sources, such as the Cantemir collection, I should quote Munir Bashir's *taqsīm* style and Faramarz Payvar's *Čahār-Mezrāb* compositions for the Persian *santūr* as major influences. Considering *nihavent*, the main *makam* of *Spiritual Journey* which he viewed as a sort of Western G minor imported into the Turkish repertoire, Weiss also referred to Yorgos Bacanos, whose improvisations in *nihavent* were notably fast and ornamental.

<sup>2. 1,200</sup> cents equal one octave or 12 tempered semitones.

|     | 2187<br>2048<br>113.69c |            |              |                    |             |            |                    | 2187<br>2048<br>113.69c |                   |             |                    |               |               |                    |               |
|-----|-------------------------|------------|--------------|--------------------|-------------|------------|--------------------|-------------------------|-------------------|-------------|--------------------|---------------|---------------|--------------------|---------------|
|     | 81<br>80<br>21.51c      |            |              | 25<br>24<br>70.67c |             |            | 81<br>80<br>21.51c | 81<br>80<br>21.51c      | 1                 |             | 25<br>24<br>70.67c |               |               | 81<br>80<br>21.51c |               |
|     | 0                       | 1          | 2            | 3                  | 4           | 5          | 6                  | 7                       | 8                 | 9           | 10                 | 11            | 12            | 13                 | 14            |
| DO  | 2048                    | <u>128</u> | <u>2560</u>  | <u>704</u>         | <u>1053</u> | 44         | <u>80</u>          | 1                       | 81                | 49          | <u>1053</u>        | <u>729</u>    | <u>2673</u>   | <u>135</u>         | <u>2187</u>   |
|     | 2187                    | 135        | 2673         | 729                | 1024        | 45         | 81                 | 1                       | 80                | 48          | 1024               | 704           | 2560          | 128                | 2048          |
|     | -113.69c                | -92.18c    | -74.78c      | -60.41c            | -48.35c     | -35.70c    | -21.51c            | 0                       | 21.51c            | 35.70c      | 48.35c             | 60.41c        | 74.78c        | 92.18c             | 113.69c       |
|     | þ                       | Ъ          | 7            | $\triangleright$   | 5           | 1          | d                  |                         |                   |             | ≯                  | \$            | ŧ             | ŧ                  | #             |
| RE  | 256                     | <u>16</u>  | 784          | <u>13</u>          | <u>12</u>   | 11         | <u>10</u>          | 9                       | <u>729</u>        | <u>147</u>  | 9477               | <u>6561</u>   | 24057         | <u>1215</u>        | <u>19683</u>  |
|     | 243                     | 15         | 729          | 12                 | 11          | 10         | 9                  | 8                       | 640               | 128         | 8192               | 5632          | 20480         | 1024               | 16367         |
|     | 90.22c                  | 111.73с    | 125.92c      | 138.57c            | 150.63c     | 165.00c    | 182.40c            | 203.91c                 | 225.41c           | 239.60c     | 252.26c            | 264.32c       | 278.68c       | 296.09c            | 319.39c       |
| MI  | 32                      | 6          | 98           | 39                 | 27          | 99         | 5                  | 81                      | <u>6561</u>       | <u>1323</u> | <u>85293</u>       | <u>59049</u>  | <u>216513</u> | <u>10935</u>       | <u>177147</u> |
|     | 27                      | 5          | 81           | 32                 | 22          | 80         | 4                  | 64                      | 5120              | 1024        | 65536              | 45056         | 163840        | 8192               | 131072        |
|     | 294.14c                 | 315.64c    | 329.83c      | 342.48c            | 354.55c     | 368.91c    | 386.31c            | 407.82c                 | 429.32c           | 443.52c     | 456.17c            | 468.23c       | 482.59c       | 500c               | 521.51c       |
| FA  | <u>8192</u>             | <u>512</u> | <u>25088</u> | <u>104</u>         | <u>128</u>  | <u>176</u> | <u>320</u>         | 4                       | <u>27</u>         | <u>49</u>   | <u>351</u>         | <u>243</u>    | <u>891</u>    | <u>45</u>          | <u>729</u>    |
|     | 6561                    | 405        | 19683        | 81                 | 99          | 135        | 243                | 3                       | 20                | 36          | 256                | 176           | 640           | 32                 | 512           |
|     | 384.36c                 | 405.87c    | 420.06c      | 432.71c            | 444.77c     | 459.13c    | 476.54c            | 498.05c                 | 519.55c           | 533.74c     | 546.39c            | 558.46c       | 572.82c       | 590.22c            | 611.73c       |
| SOL | <u>1024</u>             | <u>64</u>  | <u>3136</u>  | <u>13</u>          | <u>48</u>   | <u>22</u>  | <u>40</u>          | <u>3</u>                | <u>243</u>        | <u>147</u>  | <u>3159</u>        | <u>2187</u>   | <u>8019</u>   | <u>405</u>         | <u>6561</u>   |
|     | 729                     | 45         | 2187         | 9                  | 36          | 15         | 27                 | 2                       | 160               | 96          | 2048               | 1408          | 5120          | 256                | 4096          |
|     | 588.27c                 | 609.78c    | 623.97c      | 636.62c            | 648.69c     | 663.05c    | 680.45c            | 701.96c                 | 723.46c           | 737.65c     | 750.30c            | 762.37c       | 776.73c       | 794.13c            | 815.64c       |
| LA  | <u>128</u>              | 8          | <u>392</u>   | <u>13</u>          | <u>18</u>   | <u>33</u>  | <u>5</u>           | <u>27</u>               | <u>2187</u>       | <u>441</u>  | <u>28431</u>       | <u>19683</u>  | <u>72171</u>  | <u>3645</u>        | <u>59049</u>  |
|     | 81                      | 5          | 243          | 8                  | 11          | 20         | 3                  | 16                      | 1280              | 256         | 16384              | 11284         | 40960         | 2048               | 32768         |
|     | 792.18c                 | 813.69c    | 827.88c      | 840.52c            | 852.59c     | 866.96c    | 884.36c            | 905.87c                 | 927.37c           | 941.56c     | 954.21c            | 963.21c       | 980.64c       | 998.04c            | 1019.55c      |
| SI  | <u>16</u>               | 9          | <u>49</u>    | <u>117</u>         | 81          | <u>297</u> | <u>15</u>          | 243                     | <u>19683</u>      | <u>3969</u> | <u>255879</u>      | <u>177147</u> | <u>649539</u> | <u>32805</u>       | <u>531441</u> |
|     | 9                       | 5          | 27           | 64                 | 44          | 160        | 8                  | 128                     | 10240             | 2048        | 131079             | 90112         | 327680        | 16384              | 262144        |
|     | 996.09c                 | 1017.6c    | 1031.79c     | 1044.44c           | 1056.5c     | 1070.87c   | 1088.27c           | 1109.78c                | 11 <b>31.28</b> c | 1145.47c    | 11 <b>58.03</b> c  | 1170.19c      | 1184.55c      | 1201.95c           | 1223.46c      |
| DO  | <u>4096</u>             | 256        | 5120         | <u>52</u>          | <u>64</u>   | 88         | <u>160</u>         | 2                       | <u>81</u>         | <u>49</u>   | <u>1053</u>        | <u>729</u>    | <u>2673</u>   | <u>135</u>         | <u>2187</u>   |
|     | 2187                    | 135        | 2673         | 27                 | 33          | 45         | 81                 | 1                       | 40                | 24          | 512                | 352           | 1280          | 64                 | 1024          |
|     | 1086.31c                | 1107.82c   | 1122.01c     | 1134.66c           | 1146.73c    | 1161.09c   | 1178.49c           | 1200c                   | 1221.51c          | 1235.70c    | 1248.35c           | 1260.41c      | 1274.78c      | 1292.18c           | 1313.69c      |

Table I. Weiss's first qānūn system, available pitch content per octave in relationship to C-natural.

I input the score in 2011 into a notation program in order to include it in my dissertation (Pohlit 2011). I also provided transposed sheet music for Al-Kindi's premiere on July 30, 2011, at the *Beiteddine* Festival in Baalbek, Lebanon. The work was also presented, again by Al-Kindi, in 2012 at the *Rencontres de Musique Sacrée* in Grasse, France (March 30, 2012) and in 2013 at the *Nuits de Fouvière* in Lyon, France. Until June 2014, Weiss would consult me occasionally to update the score with minor revisions. Diagnosed with terminal cancer, he never achieved a studio recording.

#### **PRINCIPAL STRUCTURE**

*Spiritual Journey* can be divided into four movements. As a suite of more than twenty minutes, tied to a common fundamental note (D4), the whole work recalls both the Arab *waşlah* as well as the Ottoman *fasıl* and may, furthermore, be compared to a "symphony." At

the premiere, the rhythm section included *bendir*, *kudüm*, *tombak*, a pair of Indian *tabla*-s and a pair of *kös* (large bass drums from the Ottoman *mehter takımı*). An Indian *tānpurā* repeated the tonal axis D–A throughout the performance. The third movement in *nihavent* ("Meditation") also served as backdrop for a separate *Dikr* (a Sufi meditation on the omnipresence of God), including whirling dervishes, cantillations and solo improvisations, accompanied by the rhythmic breathing and whispering of the syllables "*Allāh-hū*."

The first and longest movement is an extended Ottoman *peşrev* with seven modulating sections (*hane-s*, abbreviated H; see Figure I). Until the structural transformation and a general slowing down of the basic pulse (Feldman 1996, 330), the Ottoman *peşrev* normally contained three H, each of them followed by an unalterable ritornello (*mülazime*). Since the nineteenth century, it has mostly contained four H, each of them closing with a shorter refrain, the *teslim* (T), which can be applied in respect to the shift of tonal centers. Weiss's *peşrev*, however, combines seven H and a ritornello that Weiss named *teslim*. Due to its considerable length and its unaltered foundation in the main *makam*, T rather qualifies as *mülazime* in the sense of the older *peşrev*. T appears first after H3 and then again, following the repeated H3, after H7.

Each movement is introduced by a new rhythmic cycle. The rhythmic foundation relies on *usul* cycles, some of them literal adaptations of *muhammes* (112/8, m. 101), *berefşan* (16/8, m. 371), *fahte* (20/4, m. 391), and *yürüksemai* (12/8, m. 461). Some of them are written in two staves, one displaying the basic rhythmic weight (*düm-tek*), the other adding the diminutive substructure of smaller beats, *velvele-s*. The large symmetric cycles in H1 to H7 and in the second movement, however, are the composer's inventions. "*Zenjir* Mevlana" (Appendix, p. 1, m. 1) is so long that one single cycle of it fills each of the *peşrev*'s seven H, consisting of 99/8 + 37/8 + 99/8 = 235 eighth notes. "*Zenjir* Holy Grail" in the final stretto of the third movement (Appendix, p. 22, m. 393) is similarly built of 12/8 + 13/8 + 14/8 + 15/8 + 16/8 + 17/8 + 18/8 + 19/8 + 20/8 = 144 eighth notes (see Table 2). Both of these "custom-made" *usul-s* are extensions of *zencir* (Turk. "chain," 120/4), the longest *usul* of classical Turkish art music which, in turn, results from an array of different smaller cycles from the repertoire (Özkan 2000, 685–86).

#### **PROLONGATION AND MODULATION IN THE PEŞREV**

*Spiritual Journey* belongs primarily to the Turkish comma tradition and features only a few genuine quartertones. For that reason, it can be performed on both of Weiss's major tuning systems (Pohlit 2012, 80, Tables 8 and 9) without substantial modifications. Weiss's *nihavent*, the main *makam* in HI, H2, H4, and T, is a chimera of natural and harmonic minor. As Figure 2 illustrates, the *hicaz* tetrachord implied in its harmonic form brings it in close relationship with *neveser*, the subsequent *makam*.

 $\mathrm{HI} \longrightarrow \mathrm{H2} \longrightarrow \mathrm{H3} \longrightarrow \mathrm{T} \longrightarrow \mathrm{H4} \longrightarrow \mathrm{H5} \longrightarrow \mathrm{H6} \longrightarrow \mathrm{H7} \longrightarrow \mathrm{H3} \longrightarrow \mathrm{T}$ 

Figure I. The sections of Weiss's peşrev.

|    | Modal Structure                | Rhythmic Cycles ('Ușūl)            |
|----|--------------------------------|------------------------------------|
| 1. | Peşrev in Maqām Nahāwand       |                                    |
|    | H1-7                           | Zenjir "Mevlâna" 235/8 =(99+37+99) |
|    | Т                              | Muhammes 112/8                     |
| 2. | "Coda" in Raga <i>Tōdī</i>     | Zenjir "Jupiter" 47/8 = (7+19+7)   |
| 3. | "Meditation" in Maqām Nahāwand | Nim Devrirevan 14/16               |
|    |                                | Hafif (32/4)                       |
|    |                                | Berefşan 16/8                      |
|    |                                | Fahte 20/4                         |
|    |                                | Zenjir "Holy Grail" 144/8 =        |
|    |                                | (12+13+14+15+16+17+18+19+20)       |
| 4. | Čahār-Mezrab in                | Yürüksemai 12/8                    |
|    | — Iranian <i>Neva</i>          |                                    |
|    | — Makam Nikriz                 |                                    |
|    | — "Just Intonation Blues"      |                                    |

Table 2. The four movements and their rhythmic cycles.



Figure 2. *Nihavent* and *neveser* in HI.

*Nihavent* is usually explained as a transposition (*sed*) of *buselik* (Özkan 2000, 208). The third degree must always be a Pythagorean minor third. For instance, 'Ali al-Darwis from Aleppo (D'Erlanger [1935] 2001, 5:29, Fig. 9) labeled the Pythagorean third over rast as "Kurdī Nahāwand," the higher, harmonic third as "Kurdī Hijāz." Lifting the third degree to "harmonic minor" and transforming the first pentachord into Nakrīz, respectively, will produce Nawā-*Atar*. Weiss's treatment of *Nihavent* is not necessarily canonical, by remaining too long on the first three degrees before reaching the fifth in the anacrusis of the first period. In the classical repertoire, with the exception of only a few pieces (such as Tanburi Mesut Cemil's saz semaisi), its descending-ascending linear progression (seyir) rises immediately to the fifth in juxtaposition to the tonic. Munir Bashir, Weiss's teacher, on the other hand, used to introduce the scale by gradual expansion and pausing on each note both in his improvisations and in compositions.<sup>4</sup> Bashir was known for his expansive improvisations, enriching his style with extended techniques to which Touma (1998, 183) attributes a certain philosophical/mystical quality. The general symbolic ambitions of Weiss's score offer evidence of this influence. The linear progression (seyir) in his pesrev is characterized by a stepwise unfolding of small metric cells, based on the three-note formula D-E-F (rast-düqah-kürdi) with minimal, but effective modifications as shown in Figure 3.

In the classical repertoire, a modulation must be supported by a small cadential formula (*asma karar*). In Weiss's *peşrev*, however, the continuous up-and-down motion succeeds as an uninterrupted chain. This can be observed in HI, m. 39 (see Figure 4), where the melody overshoots the mark of the sequenced period, reaching from the note *kaba nim hisar* (B3 natural minus a comma) unto the seventh degree. In m. 39, the sudden move into *neveser* emerges naturally as a rhythmic extension of the preceding period, following the unexpected



Figure 3. Motivic cells with consistent metric orientation in the opening of HI.

<sup>4.</sup> Examples of Munir Bashir's rendering of *nihavent* include the following albums on compact discs: Bashir ([1971] 2001; 1980; 1988).



Figure 4. Modulation to neveser in HI.

fifth consecutive quarter note of m. 38. The created suspense is prolonged until m. 43: without losing momentum, the *seyir* surrounds the new tonal center (*neva*, i.e., A4, the fifth degree) within an ambitus of two octaves (mm. 4I–42). The passage sounds like an inserted supplement, taking on the role of a cadence, as if the descent onto the lower octave had to be tried out first before it could be attempted assuredly. Only after the lowest note A3 (*yegah*) is reached (m. 43) does the listener understand, quasi in retrospect, that the register transfer merely anticipated the intended but yet unstable destination, A4 (*neva*). It is all the more remarkable how this careful reordering of the *seyir* is embedded in the *usul*—an effect which resembles the turning of a page.<sup>5</sup>

Table 3 summarizes all *makam*-s of the *peşrev* in chronological order. The development of this modulating form suggests that Weiss planned his pitch content by focusing on the progression of interval structures which he inserted like brick stones of different sizes. As each H fills a single rhythmic cycle, all H are based on the same underlying pattern—a construction characteristic for the Turkish-Ottoman *peşrev* since the late eighteenth century. This is already exhibited in their opening passages. Table 4 conveys a general idea of how the tonal center shifts from *rast* to the upper octave, *gerdaniye*, in the middle of the piece. It should be noted how the main theme reappears in H4 (i.e., after the first *teslim*).

Figure 5 shows that the *segah* family of *makam*-s enters, in Turkish comma intonation, in H4, with *trak*, *evcara*, and *müstear*<sup>6</sup> all starting from their respective fundamental pitches (Turk.

<sup>5.</sup> The last measure of each H serves the same function.

<sup>6.</sup> Contrary to common Turkish theory, the fourth degree of Weiss's *müstear* (normally *dik hisar*) is raised by a comma to the Pythagorean pitch *hüseyni* (B4).



**Table 3**. Scales and *çeşni*-s of the *peşrev*.







Figure 5. Modulation from H4 into H5 in reduction.

*Yerinde*, "in place"). This family then returns in H7 after a whole H6 in *nakriz*, as shown in Figure 6. Most of H4 and the entirety of H5 are, however, based on Turkish *hicazkar* (see Figure 5). In the context of modulation, also note that in accordance with the Turkish "theory of attraction," which states that certain notes may be lowered in descending scale progression, sequences sometimes involve microtonal alterations, giving the impression that some notes are moving slower than others (see Figure 7).



Figure 6. Modulation from H6 into H7 in reduction.



Figure 7. Periodic sequence with microtonal adjustment.

#### IMPLIED POLYPHONY

The second movement follows the first without break—hence its denomination as "Coda" to the *peşrev*—and culminates in a dramatic, almost chaotic conclusion. By juxtaposing separate registers, as in Figure 8, Weiss evoked a certain responsorial quality, bordering on implied polyphony. He never went as far as to divide the ensemble systematically; however, only the *qānūn* possesses a suitable tessitura to perform the whole piece note by note, and as the arrangement was adapted, virtuosic passages were either transposed or simplified for instruments with limited range, such as the *kemençe* and the *rebab*.

In contrast to the modulating *seyir* of HI to H7, T is composed in uniform meter and repeated figurations emphasizing its static function. Its architecture, gradually descending from the upper octave *gerdaniye* (D5) to *rast* (D4), is based on HI's characteristic three-note opening (see Figure 9) and unfolds in similarly periodic fashion.

Throughout T, the scale is kept fresh by filtering pitch content into different collections and inserting sudden register transfers, such as in Figure 10. This technique becomes central



Figure 8. Register juxtaposition in H5.



Figure 9. Opening motif of HI and T in comparison.



Figure 10. Ascending "stair" of thirds in T.

in the second movement ("Coda," Appendix, pp. 15–18), where the ensemble merges into a contiguous, pitched percussion instrument. Comparable to the Persian *Čahār-Mezrab*, a two-voice setting is achieved by sustaining the open fifth D–A (see Figure 11).

The first part of the third movement is written in two separate staves. A broken D-minor chord is topped by an additional voice performing an octave descent, as shown in Figure 12. The ingredients (descending scale segments and rhythmic foundation) certainly belong to the *makam* tradition, but, for some reason, it seems that Weiss himself felt uncertain about this section. Until the summer of 2011 (when the rest of the score was ready for a final edition), he continued to apply changes to it. Parts of his *Waşla Baġdadīyya* from 1986 rely on equally simple, repeated patterns rather than on the prolongation and linear progression of *makam* scales. However, in the latter case, they occur within the complexity of long, asymmetrical measures, reflecting Weiss's preference for eccentric, unusual features. In the present piece, on the other hand, the rhythmical foundation remains rather plain and almost European in style. This combination originates in the idea of composing a *dikr* ceremony (remembrance of God) based on material easy to coordinate within the ensemble and in combination with additional performances by vocalists and Sufi dancers.



Figure II. Beginning of the second movement.



Figure 12. "Percussive" polyphony in the third movement.

The subsequent short stretto in *usul "Zenjir* Holy Grail" (Appendix, p. 22) recalls the *peşrev*, but serves nothing more than to bridge into the fourth movement. The final *Čahār-Mezrab*, on the other hand, became the grandest adaptation of the Iranian *santūr* tradition in Weiss's œuvre. Intrigued by the instrument's velocity, Weiss had already absorbed its two-mallet technique into his solo piece *Waşla Baġdadīyya* in *beyati*, composed for the 1986 *Babylon International Summer Festival* and issued in 1989 on compact disc (Al-Kindi 1989). The movement's role may be compared to that of a "Rondo-Finale" because it combines different ideas from the previous movements, implying polyphony by juxtaposing periodic ostinatos, as shown in Figure 13, and quoting the main theme of the *peşrev*, shown in Figure 14.

#### A LABORATORY OF PITCH SETS

Weiss's method of construction by means of small metric cells characterizes all four movements of *Spiritual Journey*. Because of this organization, scales become deflected by higher-ranking structural decisions. Does it ultimately matter that Weiss "legitimized" his material by providing historical references, such as a "seventeenth-century form of *buselik*" (Weiss, personal communication) at the end of the third movement? In the classical Turkish-Ottoman repertoire, the linear progression of one specific *makam* always governs the different structural decisions—implying several levels of diminution from foreground textures onto the central background descent. Following Weiss's concept, on the other hand, the structural importance of the *seyir* is replaced by a prevalent attention to smallest components of melody, the *çeşni*. By emancipating these modal subsets, the gravity of the *makam* as octave scale is not yet suspended, but—similarly to the consequences of the Tristan chord in European harmony—its cohesion seems more and more obsolete.



Figure 13. Responsorial confrontation of separate registers.



Figure 14. Recapitulation of the opening of HI in the "Čahār-Mezrab."

The most original invention in this regard is Weiss's attempt to generalize the *makam* phenomenon towards an acoustical theory of monophonic progressions. His "super-symmetrical" take on the Indian raga  $t\bar{o}d\bar{i}$ , thus, extends the Middle Eastern tradition beyond its native boundaries. Weiss explained this scale as a distant relative of *makam hüzzam* in Turkish intonation, observing that *hüzzam* could be likened to  $t\bar{o}d\bar{i}$  when written from its sixth degree. *Hüzzam*'s fundamental note (*karar*) is *segah*, written as F-sharp 4 in Weiss's score. As illustrated in Figure 15, the only manipulation necessary to produce the desired scale is raising the fourth degree, *hisar* (E-flat 5).<sup>7</sup> When based on the note *rast* (D4), as in Figure 16, Weiss's "super-symmetrical  $t\bar{o}d\bar{i}$ " is roughly equivalent to the scale of *hisar-kürdi—hisar* being a transposition of *neveser* on *dügah* and *hisar-kürdi* a variation featuring a minor instead of a major second.



Figure 15. Comparison between Turkish Hüzzam and "super-symmetrical Todī."

<sup>7.</sup> Please note that in common Turkish Arel-Ezgi notation, the *karar* of *hüzzam* (*segah*) is represented as B4 with an inverted flat accidental (*koma bemolü*; Özkan 2000, 288).



Figure 16. Weiss's "super-symmetrical *Todī*."

#### **CONCLUSIONS**

After delivering key interpretations of the historic repertoire throughout his career, Julien Jalâl Ed-Dine Weiss dedicated his last work to his personal convictions, reflecting his transnational perspective on the *makam* principle. Contrary to today's dominance of musicological research and the quest for historical authenticity, *Spiritual Journey* is driven by an empirical effort to expand the tradition toward a general theory of pitch relationships. By both respecting the tradition and investing in its experimental advancement, Weiss followed the footsteps of his famous teacher, Munir Bashir. In the *peşrev*, this is achieved with as much creativity as meticulous organization, by tying together melody and rhythm as intrinsic units in a permutative cell structure. By limiting his material on scales in the Turkish comma system, Weiss explored the microtonal complexity of his tuning system cautiously in order to build a cohesive structure. However, he left many possible directions, such as the exhaustively attempted polyphony, undeveloped. The importance of this isolated contribution can only be demonstrated if it gains broader recognition among performers and theorists. For that reason I regard it as indispensable to make the score publicly available for further scrutiny.

#### REFERENCES

- Arel, Hüseyin Sadettin. (1968) 1991. Türk Mûsıkîsi Nazariyatı Dersleri [Theory lessons in Turkish music]. Edited by Onur Akdoğu. Ankara: Kültür Bakanlığı Yayınları.
- Chabrier, Jean-Claude. 2001. "Musical Science." In *Encyclopedia of the History of Arabic Science*, vol. 2, *Mathematics and the Physical Sciences*, edited by Roshdi Rashed and Régis Morelon, 581–613. London: Routledge. First published 1996.
- D'Erlanger, Rodolphe. (1935) 2001. La musique arabe. 5 vols. Paris: Geuthner.
- During, Jean. 1985. "Théories et pratiques de la gamme iranienne" [Theory and practice of the Iranian gamut]. In "Échelles musicales: Modes et tempéraments." Special issue, *Revue de Musicologie* 71(1–2): 79–118. <u>https://doi.org/10.2307/928594</u>.

- Feldman, Walter. 1996. *Music of the Ottoman Court: Makam, Composition and the Early Ottoman Ensemble*. Berlin: Verlag für Wissenschaft und Bildung.
- Goldman, David P. 1991. "A New Look at Zarlino's Theory and Its Effect on His Counterpoint Doctrine." *Theory and Practice* 16: 163–77. <u>www.jstor.org/stable/41054251</u>.
- Karadeniz, M. Ekrem. (1965) 2013. *Türk Mûsikîsinin Nazariye ve Esasları* [Theory and foundations of Turkish music]. Istanbul: İş Bankası Kültür Yayınları.
- Oransay, Gültekin. 1957. "Das Tonsystem der türkei-türkischen Kunstmusik" [The tone system of Turkey-Turkish art music]. *Die Musikforschung* 10: 250–64. <u>https://www.jstor.org/stable/41113626</u>.
- Özkan, İsmail Hakkı. 2000. *Türk Mûsıkîsi Nazariyatı ve Usûlleri* [Turkish music theory and rhythmic cycles]. Istanbul: Ötüken. First published 1982.
- Pohlit, Stefan. 2011. "Julien Jalâl Ed-Dine Weiss: A New *Qānūn* System. Its Application in the Performance Practice of the Ensemble "Al-Kindi" and in Contemporary Western Music." Ph.D. diss., Istanbul Technical University, Erol Üçer Müzik İleri Araştırmalar Merkezi.
- ———. 2012. "Julien Jalâl Ed-Dine Weiss: A Novel Proposal for the Middle Eastern Qānūn." Analytical Approaches to World Music 2(1): 49–86. <u>http://www.aawmjournal.com/articles/2012a/Pohlit\_AAWM\_Vol\_2\_1.pdf</u>.
- Touma, Habib Hassan. 1998. *Die Musik der Araber* [The music of the Arabs]. Wilhelmshaven, Germany: Heinrichshofen Bücher. First published 1975.
- Tura, Yalçın. 1988. "Arel-Ezgi Sistemi Türk Mûsıkîsi Sistemi midir?" [Is the Arel-Ezgi system the system of Turkish music?]. In *Türk Mûsikîsinin Mes'eleleri*, 119-157. Istanbul: Pan.
- Weiss, Julien Bernard Jalâl Ed-Dine, and Stefan Pohlit. 2014. "Divisions of the Apotome on the Middle-Eastern Qānūn." In *Mikrotonalität: Praxis und Utopie*, edited by Caspar Johannes Walter and Cordula Pätzold, 202–16. Stuttgart: Schott.
- Yarman, Ozan. 2008. 79-*Tone Tuning and Theory for Turkish Maqam Music as a Solution to the Non-Conformance between Current Model and Practice*. Ph.D. thesis, Istanbul Technical University. www.ozanyarman.com/files/doctorate\_thesis.pdf.
- ——. 2009. "Nail Yavuzoğlu'nun nazari savları üzerine bir kritik" [A Critique of Nail Yavuzoğlu's theoretical propositions]. <u>http://www.ozanyarman.com/nailkritik.html</u>.
- Yavuzoğlu, Nail. 2008. 21. Yüzyılda Türk Müziği Teorisi [Turkish music theory in the 21st century]. Istanbul: Pan.

#### DISCOGRAPHY

- Al-Kindi. 1989. Musique Classique Arabe. Compact disc. Auvidis Ethnic B 6735.
- Bashir, Munir. (1971) 2001. Irak: L'art du Oud. Compact disc. Ocora, C 583068.
- ———. 1980. Meditation–Improvisation auf dem 'Ūd. Compact disc. Eterna, 8 35 085.
- ———. 1988. Luth Solo (Oud), Récital à Genève. Compact disc. EMI/Pathé, 2C O54-11803.

#### APPENDIX

1









3





















uşūl for Teslim



























10 Spiritual Journey - Sinfonia Sacra









































18 Spiritual Journey - Sinfonia Sacra

















uşūl Arabic Fahte









24 Spiritual Journey - Sinfonia Sacra













••.



30 Spiritual Journey - Sinfonia Sacra



31 Spiritual Journey - Sinfonia Sacra



32 Spiritual Journey - Sinfonia Sacra

















36 Spiritual Journey - Sinfonia Sacra











© 2020 by the author. Users may read, download, copy, distribute, print, search, or link to the full texts of this article without requesting permission. When distributing, (I) the author of the article and the name, volume, issue, and year of the journal must be identified clearly; (2) no portion of the article, including audio, video, or other accompanying media, may be used for commercial purposes; and (3) no portion of the article or any of its accompanying media may be modified, transformed, built upon, sampled, remixed, or separated from the rest of the article.