

## BACK TO MODALITY

### MUSICAL MODES REVISITED

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#### HAROLD POWERS' INITIAL STANDPOINT

As early as 1958, Harold Powers<sup>1</sup> wrote that he could easily describe and produce examples of the basic characteristics for a specific South Indian raga. He said he could describe or define the concept of its essential features. However, attempting at comparing a raga to an ecclesiastical mode would be unthinkable on the basis of the immense generality of the proposition.

Fifty years later Elizabeth Markham<sup>2</sup>, one of the most distinguished scholars of Medieval Japanese music<sup>3</sup> and a former disciple of the late Laurence Picken, postulated that the melody of some Japanese Buddhist chant was composed in an ecclesiastical Aeolian mode on A (with one sharp), or, in a Mixolydian mode on A (with only two, rather than three, sharps). Later she concluded that the *Sōrai kada* (Fig. 2), a 6.123.5 pentatonic set on E in mode-key *hyōjō*, was in fact a diatonic ecclesiastical Dorian.

In order to establish a better comparison of any piece with ecclesiastical modes, I would suggest a transnotational<sup>4</sup> transposition in order to place the *pycnon* (the characteristic Major third)<sup>5</sup> on *fa-sol-la* (written F-G-A).

The *Global chant database*<sup>6</sup> for a *fa-la-do-ré-do* incipit, yields many works, mostly from the 5<sup>th</sup> mode (*fa-do*), although the *finalis* is usually *fa*, and not *ré*.<sup>7</sup>

Had we searched for a scale and a *finalis* instead of looking for an incipit, we would have found something similar to an ecclesiastical Dorian/Aeolian mode. Most musicians would have spontaneously said that it was F major moving to D minor.

However, *fa la* ending on *ré* is also and simply the first Psalm<sup>8</sup> tone (Fig. 1).

I would argue that this piece would be best described, although not defined, according to Tran Van Khê's teaching, as an anhemitonic pentatonic 6 1 2 3 5 6 with pivotal notes 6 1 3, that is the Chinese *yu diaoshi* 羽調式. Comparing it to the ancient Shen Gua<sup>9</sup> B1/531 mode system of the Tang dynasty, we would probably

assimilate the *Sōrai kada* to the 4 *Zhongliu diao* 中呂調, or to a form of *la* in a Jiazhong tone.



Fig. 1. The First Tone extracted from the *Paroissien romain* 119.

In respect of Christian ecclesiastical music, Powers came to the conclusion that its modal system is fundamentally an analytical method used for the classification of melodies, but that in Indian music praxis the raga system forms the practical basis of self-renewing spontaneous creativity.

#### TRAN VAN KHÊ'S APPROACH

It is now appropriate to present Professor Tran Van Khê's introduction to the question. Although his theoretical article on modes was only published in 1990,<sup>10</sup> as a young Vietnamese musician and musicologist, he had been trained in the West and had known Jacques Chailley, Constantin Brăiloiu, Lee Hye-Gu, Ravi Shankar and Munir Bashir for some time. Furthermore, his own perception and his teachings, his experience and praxis, his exchanges, had led him to a sophisticated perception method of tonal, modal, and pentatonic music, analytically as well as in its reproduction. His comprehensive bibliography included an article published in 1971<sup>11</sup> and his more detailed "*Pour une histoire universelle de la musique*".<sup>12</sup> After many passionate discussions with Jacques Chailley, his master,<sup>13</sup> he wrote:

"4) About Musical modes in Asia

In Asian music, there are neither major nor minor modes. They cannot either be compared to Church or to Medieval modes. In Asia, the concept is both a complex and a dynamic one. It is complex because it can only be defined in respect of its various components such as the scale, the hierarchy between degrees, specific ornaments, melodic motifs or *formulas*, modal mood, ethos, and so forth. It is dynamic because even if all of these elements are present, they do not reveal the mode within as these are only ingredients of the mode but not the mode itself. [...] In order to extract the mode within Asian music, a musician must be able to blend all of the ingredients into a mostly improvised melodic development leading to a modal mood bearing various names according to whence from it comes: *râga* in India, *dastgâh* or *avâz* in Iran, *maqam* in Arabian countries, *makam* in Turkey, *mugham* in some Asian parts of the Soviet Union, *điệu* in Vietnam, and *patet* in Indonesia."<sup>14</sup>

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I have argued elsewhere<sup>15</sup> that pentatonism and modality must not be confused. In a list of mode nomenclature, in the aforementioned paper,<sup>16</sup> additionally to *điều* and *patet*, Tran Van Khê distinguished melodic music (of the Chinese family type), heterophonic music (from South-East-Asia, itself classified into equiheptatonic and equipentatonic divisions of the octave) and modal music (of Central and Southern Asia, Indian and Persian family types; West Asia, Turkic-Arabian family types).

It must be observed that there is a strong ideological determination in the choice of mode as a qualifier for Oriental or popular music. Placed in front of an hegemonic system, built with history, famous names, vast repertoire, systems of assumed precision, writing, assumed autonomy of Western Classical composition, musicians and musicologist took for granted the ability for Oriental musicians to improvise and link this to a complex system comparable to constructions of the Ancient World rather than related this to indigenous spontaneity. Thus modality came to be perceived as an excellent transnational motto. Only this ideological bias can explain why Tran Van Khê attempted at rationalising Vietnamese and Indonesian music through a modal concept. He also explained as clearly as he could considering the period at which he was writing, a concept which he named, “aspect” or “aspect d’octave” after Brăiloiu<sup>17</sup>.

“On each of the five degrees of the pentatonic scale *fa sol la do ré*, a mode can be created: *sol la do ré fa - la do ré fa sol - do ré fa sol la - ré fa sol la do*.”

This is a textual translation of the Chinese concept of *diaoshi* 調式, of which the Chinese theory knows five: *gong shang jue zhi yu* 宮商角徵羽 (*do ré mi sol la*, now written 1 2 3 5 6). However, the meticulous study of the Chinese repertoire rarely shows the use of such a concept. When it does, such as in the 20<sup>th</sup> century *Mei'an qinpu* zither book of notation, there is no tune in *jue diaoshi* (*la do ré fa sol*, which “aspect” does not include the fifth). The Chinese determination of the “aspect” or *diaoshi* is as loose as the modern Western Dorian or Mixolydian determination: you look at the notes, you determine the

scale and the key, and you look at the *finalis*, the last note which is played. This is enough to find out the name of the mode, or the “aspect”, or *diaoshi*. Such refined and well documented music repertoires as Fujian Nanyin or Kunqu drama distinguish between the various scales (keys, *guanmen*) and include many melodic types (*gunmen*). It is neither a question of improvisation, nor is it the respect of rules, but it is a practical matter of the choice of fingering on the flute and of the tuning of the lute.

The French historical modal concept approach and its application in non-Western and mainly Asian music is in its own way simpler and a more efficient one than all the erudition and controversies spear-headed by Harold Powers in his ever-questioning of modal universality.

In his seminal article<sup>18</sup>, Tran Van Khê defines the fundamental characteristics of modes as they appear in *rāga*, *dasgāh*, *avāz* and *maqām* as having:

1. A modal scale with its own specific structure.
2. A hierarchy between degrees.
3. A typical melodic formulation for each mode.
4. A modal emotion (ethos) linked to each form of mode.

As secondary characteristics, Tran Van Khê adds ornamentation as well note and silence lengths.

## MUSICIANS' PERCEPTION OF MODE

I shall not attempt at giving here my own definition of what mode is although I have developed my own concept through listening, modelling, analysing, playing, as well as through controversy, teaching, writing. As an ethnomusicologist, I am aware of various postulates, strategies and concepts which lead to endless disagreements.

### Scale or formula

Musicians and musicologists can build up a pool of modes distinguishable, preferably, by their scale hierarchy, or distinguishable because of specific formulations, specific ornaments, or even with praxis in various cultures, such as *maqām* or *rāga*.



Fig. 2. “Sōrai kada”, Markham (Soorai Kada – *Shokyoo yobun kada shuu*, Japan, end of the 13<sup>th</sup> century. Transcription by Elizabeth Markham [2008, p. 34]).

Anecdotically, Jean-Christophe Frisch, a Baroque flautist of great liberalism and knowledge, was once working on a cross-over program with Syrian musicians. His counterparts were playing, let us say *maqām rāst*, or *bayātī*. He asked what he could or could not do. One of the musicians, an expert, told him: “you have to know the whole system, all of the scales, the central elements on which to focus, the compulsory variations. You start with such a tetrachord or *jins*, and then modulate to this other one, then to that one or that other one (according to the genre and the type of meter), and end on that one. You need also to know all the repertoire which has been previously played by the masters.” Another musician, also an expert, told him: “you use that fingering as tonal centre, the second note is a bit flattened, the third is reached from the fourth and the fifth should be clearly articulated. You have to alternate flat and pure seven — and for the sixth? — just follow me.” He did.

The same position was brought up by two respected musicians in Brest<sup>19</sup>. Ross Daly explained that one has to live with the *maqām* in order to understand and know it. If you have, for instance, a good, accurate, precise graphic description of a person, it will nevertheless be impossible to recognise him or her among a crowd. But if you have met that person once before, even after years and wearing different clothes, you will recognize them at once. However, it can take many years before knowing that you know only just a small part of the local repertoire. On the other hand, Titi Robin explained that he listened to the musicians he met, began to play with them, played a theme, not even a scale, and all played along pleasurably, efficiently, and successfully.

### Voice and fingerings

Some of the best analytical presentations of modal music have been made by mentally mapping the positions of the fingers onto the unfretted fingerboard of the *ūd*<sup>20</sup>. The presentation *a capella* of the modal system of the Catholic Church by Dominique Vellard<sup>21</sup> shows long term strategies where solmisation of *mi-fa* is as important as the constant reference to the main note, even if you never play it. On a Moroccan night concluding Ramadan, there were three royal cantors singing responsorially. They sung complex melismas and ornamentations, with sophisticated modulations. Two of them excelled and ended with astonishing, beautiful, and imaginative figures on the main note of the *maqām*. The third one, who was without any doubt the spiritual winner of the competition, never sang that note, the *rāst*. However, it was always felt as each note, each figure, each formula, remained suspended towards the end. This could only have happened at the end of the last night of the Holy Month.

Debussy or Bill Evans have a keyboard approach to modality, mentally mapping black and white. Others have a modal concept linked to specific tunings, or

*scordaturas*, similar to the Chinese fretless *qin*-zither. As for myself, I need to imagine which fingerings on my uneven temperament six-hole flute correspond to the *fa-sol-la* so that I can understand Dominique Vellard's modes, Titi Robin's lute improvisation, a Brittonish *gwerz*, a song played on the *cabrette* bagpipe, a ballad in *nanyin* genre, the modulation in Bach's *Matthais Passion* with various renderings of “O Haupt voll Blut und Wunden”.

I would like also to investigate the practice of French musicians playing “musiques traditionnelles de France”, a difficult concept akin to “French Folk music” where “traditional” means “traditionally informed performances”. They have their local theory, practice, fingerings, and names of modes. At first I was astonished, even shocked, by what I felt was a poor and even a wrong usage of “*plagal*” and “*authentic*”. I was also for the peculiar usage of “Dorian” with Jazz musicians. As an ethnomusicologist, however, I can understand their music and practice as they play it. In the current practice of French bagpipe music (where “French” is to be taken as “French folk music”, but not necessarily including Brittany), taking Eric Montbel<sup>22</sup> as paradigm, there are two modes. “*Authentic*” which is characterized by the tonic played with the left (upper) hand closing the fingerholes, and “*plagal*” which is characterized by the tonic played with both hand closing the fingerholes. If the right (lower) hand has four holes and not three, it is not clear, at least for me, if “*plagal*” is the lowest note possible, or a fourth below the left hand. If we take a modern, standard soprano recorder (*Blockflöte*) in C, it will mean that “*authentic*” has G as tonic, while “*plagal*” has C or D. If we take a six-holes *tinwistle* in D, it is clear that “*authentic*” has G as tonic, while “*plagal*” has D.

### Temperaments

The very unspecific un-tempered status of my wooden flutes (*traverso*, Günther Körber, Berlin, 1977) is invaluable for the Chinese traditional pentatonic repertoire, the Brittonish *gwerz*, the Indian *rāga*, the Arabian *māqām*, Gregorian or Byzantine chant :  $C D E^{7/8\text{fla}}$ ,  $F G A B^b$  or  $B^{7/8\text{fla}}$  or B, with a structural *do ré fa sol la* on C (D or low G according to modern pitch), only one real major third (F-A), and a chromatic note which is missing between C and D. But my old friend master Chen Zhong from Shanghai showed me that with the same flute he could play perfectly tempered while maintaining the supreme esthetical criteria, the “local flavour” (*difang weidao* 地方味道). At the absolute opposite, such a trained and accomplished musical couple as Rosy Azar Beyhom and Amine Beyhom<sup>23</sup> could not agree to identify as “the same” two performances by the same musician, the reputed Habil Aliev himself, of “Bayât-i Shirâz” played before and after the fall of Soviet Union and, with it, the fall of equal temperament.<sup>24</sup>

We shall not mention the many musicians, listeners, or musicologists who like Harold Powers himself, upon

hearing an un-tempered *gamelan* perceived and analyzed it as modal. Then what of Erik Marchand<sup>25</sup> training his Breizh Academy students to produce perfect quarters-of-tones instead of mapping a specific path in the forest of coloured notes.<sup>26</sup> Then what of Ibrahim Malouf unable to play a simple *nihawand* or a *jaharkah* because of the lack of an Arabian (blue?) note.<sup>27</sup>

This research is still in progress, but a possible explanation could be that Powers, Marchand, and Malouf do perceive the difference between un-tempered and equally tempered music as a fundamental characteristic allowing them to identify music as being modal or not, when modal musicians mostly refer to a hierarchy between fixed and mobile tones. In another terms, the difference between diatonic and *Zalzalian*<sup>28</sup> intervals is not a matter of intervals, but one of structure.

#### TOWARDS THE RESOLUTION OF THE APORIA RESULTING FROM THE ABSENCE OF THE FINAL BEFORE THE END

Many theoreticians and musicians, in Asia (including China) and in Europe, define (or use an implicit definition) in which the mode/*diao* of a specific piece is defined firstly by its scale (the set of notes needed to play the piece), secondly by the degree on which it ends. It is probable that those theoreticians and musicians know that this is very problematic. One of the problems is that if the final note gives the answer to the question “to which mode are we listening”, this would mean that there is no modal feeling prior to reaching the end of the piece. This contradiction is resolved by playing a drone note of reference or the tonic, the Indian *sa*. To my own amazement, many *musiciens traditionnels* performing in France, especially with Medieval music<sup>29</sup>, proceed in this fashion. They define modality from the pitch of the drone. But then, what if the drone is not the modal pole, the reference? Another question is if they know that this method does not work, why not choose another method?

Harold Powers has shown<sup>30</sup> that the difference between authentic and plagal modes (taking the example of modes 1 and 2) during the Renaissance has been assigned alternatively to three characteristics and not just one: ambitus, system and final, final alone.<sup>31</sup>

#### Cultural, universal, transcultural

Powers's proposal offers one of the best sets of solutions when dealing with autochthonous discourses, historically and culturally determined ensembles, and systems. Ethnomusicologists as well as anthropologist have a tendency to think that way and this is the case too with historians. This is known as an *emic* point of view<sup>32</sup>. But in a way it is a regression towards the admittance of intercultural incommunicability. This is why I chose to

complete the internal understanding of each system with the observation of people in contact. By “people in contact”, I mean a musician from a modal culture who listens to and plays with musicians from another modal culture. A definition of modality is the possibility for someone trained in a modal system to understand the musical journey of a musician from a different culture and to follow the path a musician is taking in order to understand his strategy without *emically* be knowledgeable of his system. I have noticed this with Soufiane Feki, trained in Tunisian *maluf*, and with Arabian, Turkish, Persian, Azeri, Baluch, Indian, Tajik-Uzbek, Uygur music, and being able to appreciate it, understand it, describe it, analyze it, while not being able to appreciate Japanese, Chinese or Javanese music.

So I call modality what Dominique Vellard and myself, and my students, hear as modal in the *gwerziou* sung by Yann-Fañch Kemener<sup>33</sup>, such as the intriguing and stimulating dialogue between doublebass player Riccardo Del Fra and Breton singer Annie Ebrel<sup>34</sup>.

Like Erik Marchand, I call modality his compulsion to blend his voice with Titi Robin's *ūd* rather than with a harmonic / rhythmic guitar with an added solo guitar<sup>35</sup>.

#### A TENTATIVE ZURÜCK ZUR GENERAL MUSIKWISSENSCHAFT

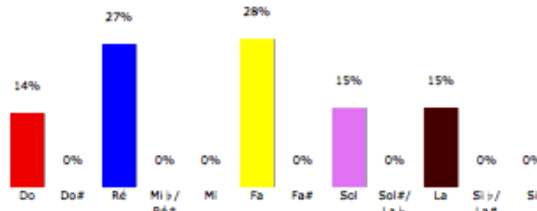
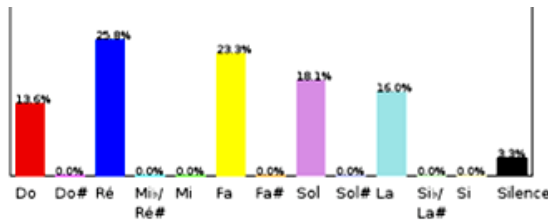
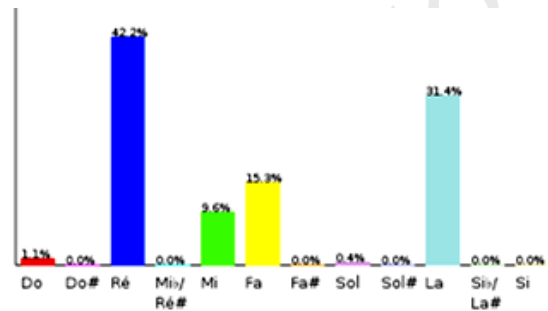
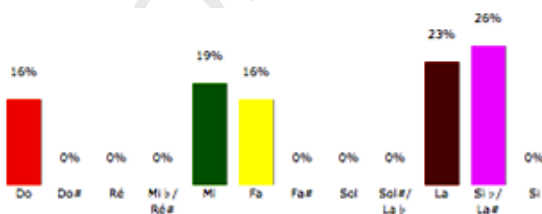
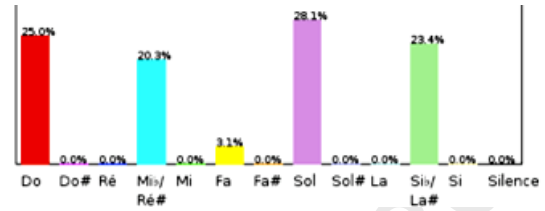
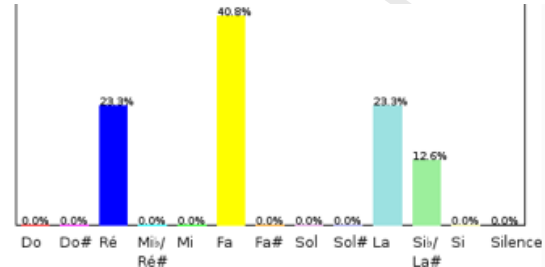
The identification of a mode from its key-signature and from specific formulations, although largely attested by ethnography, is irrelevant for the purpose of theory, since it does not specify how this formula could be related to a specific scale and to the hierarchy of its degrees.

Ross Daly is certainly right, and modality needs more time to process. But his own perception of a mode as a person that you can recognize in a crowd suggests that a mode placed in a cultural context is reflected as a mental image resembling a face or a map, but not a place in a system or a name. After years of work, Jacques Chailley invited by me to celebrate his 80<sup>th</sup> birthday at a France Culture radio program on *Modes*. This concluded with a clear definition: modal music is a journey between different stations, a peregrination, a travel from place to place. Westerners very early on noticed<sup>36</sup> that Persian and Arabian musicians spoke of their music as “going from this city to that one, or going from the finger to the elbow”, or “going from Ispahan to Babylon”. In fact, this is the old concept of *sayr* (travel) used by Arabian musicians or *seyr* (seyir) by Turkish musicians.<sup>37</sup>

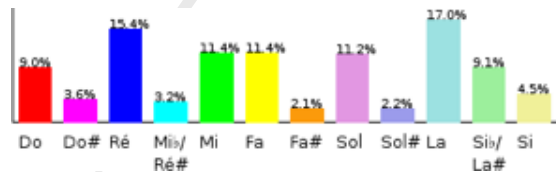
We should now take Tran Van Khê postulation more in depth, and attempt at building up an idea of mode while ignoring the final and the specific formulas. While developing a tool that I designed with Monika Stern, who was struggling with the atypical scales of Vanuatu, we (Monika Stern, Nicolas Meeüs, François Picard, Alice Tacaille)<sup>38</sup> have developed the *Monika* process: it gives a synthetic histogram of a musical piece by counting the



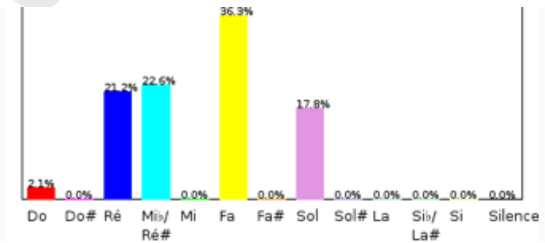
total duration of each note. The specific intonation is considered as irrelevant, and there does not seem to be a need to go from a twelve-note system to a twenty-four note system, since there is no relation of an existing mode where a specific note (like *do re mi...*, *sa re ga...*, *shang che gong...*) could take more than two different fingerings in the same piece. But this is still an open question. However, we came up, through the imbrication of *Monika*<sup>39</sup> and *Psautiers*<sup>40</sup>, to develop the hypothesis that the time orientation from one note to the other, the journey, is not the only criterion, but the duration of each<sup>41</sup> is concurrently important. Here are some histograms<sup>42</sup>: respectively Japanese, Chinese, Korean, Balinese, Peruvian, Guyana, Bach, Syriac, India, Renaissance, Breton.

Histogram 1. *Sōrai kada* – Japan (Markham).Histogram 2. *Pingsha luo yan, Mei'an qinpu*, China (Picard).Histogram 3. *Taegum Sinawi* (Shon).Histogram 4. *Hudan mas*, Bali (Picard).Histogram 5. *Qayra*, Quechua, Peru (Saint-Sardos).

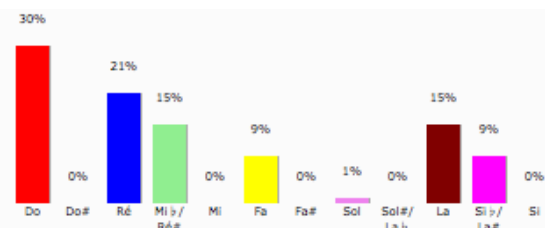
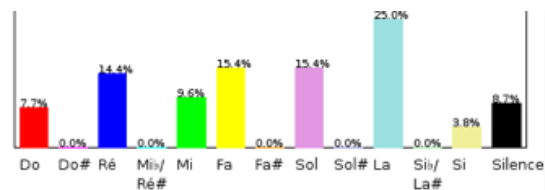
Histogram 6. "Tamanuwa" Wayäpi, Guyana (Picard).



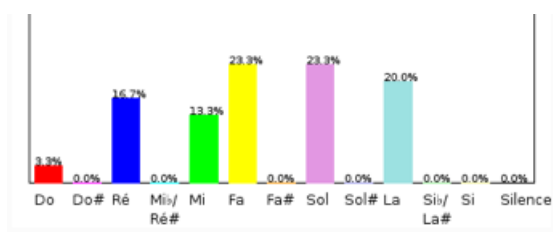
Histogram 7. JS Bach BWV 1004 (Picard).



Histogram 8. 761 "Syriac" (Chédid).

Histogram 9. *Alāp rāga bageshri*, Hariprasad Chaurasia (Debove).

Histogram 10. Ps CXXXVII, Marot (Tacaille).

Histogram 11. *Gwerz Skolvan*, Brittany (Picard).

At a glance one can work out that a Buddhist chant from medieval Japan is closer to Chinese instrumental music from modern times than to any other music. The same applies for the *gwerz*, best compared to Renaissance Psalm. As for J.S. Bach, one can understand easily that in the structure of the scale *F C G D A E*, the tonal centre is *D*, and the key is *D* minor. But is it tonal, or modal? It is Bach, respect!<sup>43</sup>

#### CAN WE SPEAK OF MODE IN THE ABSENCE OF A SYSTEM?

Probably all specialists and connoisseurs will agree that with modal music each piece performed is related to a specific mode which is part of a larger system, composed of main and derivative modes, regular or standard and transformed or irregular modes.

The generation of a modal system can mainly be done in two ways:

1. Displacement of the origin on a fixed rule with uneven graduations (the famous Jazz modes obtained by playing only white keys on the

keyboard and changing the origin or final).

2. While keeping a unique origin (*do*, *C*, *sa*...) making different alterations of the second, third, fourth, sixth, seventh<sup>44</sup>.
3. Combining both, which is the traditional way of working out *maqāmāt*.

From an *emic* point of view, it is still difficult to speak of such a generality as “mode” or “modality”, and one cannot but just approve with those who wish to speak of *rāga*, *daṣṭgāh*, *avāz* and *maqām*, *mode*, *ton*, *diao*, *Iraq*, *Isfahan*, *Rast*, *Bageshri*, *plagal* in terms of their own cultures, times, places, and people. But the ability of human mind to switch from one specific system to another cannot be denied, and it has been developed at its best to my knowledge, by Bulgarian musicians and Indonesian musicians, both belonging to cultures using both pentatonism and modality<sup>45</sup>, and familiar with tonality because of modern music education.

If Psalm CXXXVII by Marot and Bèze<sup>46</sup> is modal, how could we say that “Skolvan” is not for the reason that the singers have — to our knowledge — no names for it and that the specific mode they use is not part of a larger system? The proof of the inner knowledge of modality is the ability showed by such experts as Yann-Fañch Kemener and Françoise Atlan to correct mistakes in the written transmission<sup>47</sup>, to correct inflexions and to fit it in traditionally informed performance, a musicologically correct rendition.

As a last proof that modality<sup>48</sup> exists<sup>49</sup>, Jacques Chailley agreed with me that the clearest criterion would be to be able to hear a musical piece based on a *do*-mode, ending on *do*, as modal<sup>50</sup>.

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## Notes

<sup>1</sup> [Powers, 1958], accessed 19/02/2010.

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<sup>3</sup> Her own words.

<sup>4</sup> By “transnotation” we mean, after Mireille Helffer, the transfer from one system of notation to another.

<sup>5</sup> The use of the term pycnon here refers to Bräiloiu and the ethnomusicology of pentatonism, not to Ancient Greece.

<sup>6</sup> [Global Chant Database (site), 2012].

<sup>7</sup> [Anon. *Paroissien romain*, 1924].

<sup>8</sup> [Anon. *Paroissien romain*, 1924, p. 119].

<sup>9</sup> [Shen, 1962].

<sup>10</sup> [Trần, 1990].

<sup>11</sup> [Trần, 1971].

<sup>12</sup> [Trần, 1987].

<sup>13</sup> [Chailley, 1960].

<sup>14</sup> “4) Les « modes musicaux » en Asie. Dans les musiques d’Asie, il n’existe pas de « mode majeur » ni de « mode mineur ». On ne peut les comparer ni aux modes ecclésiastiques ni aux modes médiévaux. Le concept de « mode » en Asie est à la fois complexe et dynamique, complexe parce qu’il ne peut être défini que par plusieurs éléments : échelle modale, hiérarchie des degrés de l’échelle, ornements spécifiques, motifs ou formules mélodiques, sentiment modal, sentiment de l’ethos, etc., dynamique parce que si nous réunissons tous

ces éléments, nous ne percevons pas encore le mode, car nous avons simplement des matériaux de base pour reconstituer un mode mais pas encore le mode lui-même. [...] Pour le « mode » en Asie, il faut qu'un musicien utilise les éléments que nous avons cités, dans un développement mélodique souvent improvisé pour que nous sentions réellement le « mode » qui porte des noms différents : *rāga* en Inde, *dastgāh* ou *avāz* en Iran, *maqam* dans les pays arabes, *makam* en Turquie, *mugham* dans certains pays d'Asie de l'Union soviétique, *điệu* au Viêt-nam, *patet* en Indonésie.”

<sup>15</sup> [Picard, 2001].

<sup>16</sup> [2001, p. 119].

<sup>17</sup> [Brăiloiu, 1953].

<sup>18</sup> [Trần, 1990].

<sup>19</sup> [Drom, 2012].

<sup>20</sup> [Chabrier].

<sup>21</sup> [Vellard and Binchois (Ensemble), 1989].

<sup>22</sup> (Note from the editors): French bagpiper and musicologist.

<sup>23</sup> (Note from the editors): Lebanese musicians and musicologists.

<sup>24</sup> [Aliev, 1989] & [Aliev, 1991].

<sup>25</sup> (Note from the editors): well-known Breton singer. See p. 5-10 in the present volume.

<sup>26</sup> (Note from the editors): see the tribune of Erik Marchand, p. 8-9 in the present volume.

<sup>27</sup> All these allegations are based on direct personal observations.

<sup>28</sup> (Note from the editors): the so-called “neutral” intervals in Oriental *maqām* music.

<sup>29</sup> René Zosso, John Wright, Evelyne Girardon.

<sup>30</sup> [Powers, 1981], accessed 06/11/2010.

<sup>31</sup> See also [Meets, 1997].

<sup>32</sup> See [Popovic, 2008].

<sup>33</sup> [Kemener, 1988].

<sup>34</sup> [Ebrel and Del Fra, 1998].

<sup>35</sup> [Marchand, Robin, and Hameed Khan, 1991].

<sup>36</sup> “Leurs *Notes de Musique* ne sont pas des *syllabes* sans sens et sans signification, mais ce sont, ou des noms de *villes* du Païs, ou des noms des *parties du corps humain*, ou des plus ordinaires choses de la *nature* ; & quand ils enseignent cet *Art*, ils disent pour marquer les modes, *allez de cette ville à celle-là*, ou, *allez du doigt au coude* : les noms des *quarante-huit tons divers*, sont des noms de *ville*, à cause, disent-ils, que ces divers *tons* sont affectez & particuliers en ces *villes*” – [Chardin, 1711, v. 5, Chapitre VII « De la Musique », p. 67–68].

Revisited by Rousseau [1768, p. 74–75] : “À la vérité les Persans donnent des noms de Villes de leurs pays ou des parties du corps humain aux quarante-huit Sons de leur Musique. Ils disent, par exemple, pour donner l'intonation d'un Air *Allez de cette Ville à celle-là* ; ou *Allez du doigt au coude*. Mais ils n'ont aucun signe propre pour exprimer, sur le papier, ces mêmes Sons”. Emendated by Nicolas-Étienne Framery [1791, p. 211–212] : “Ce n'est pas aux quarante-huit sons de leur musique que les Arabes & les Persans ont donné des noms de villes, mais à leurs modes ; ainsi ils disent *allez de cette ville à celle-là*, par exemple, *d'Ispahan à Babylonne* ; ils veulent dire : *passiez du mode d'Ispahan au mode Babylonien*.”

<sup>37</sup> See [Feldman, 1993].

<sup>38</sup> (Note from the editors): musicologists members of the PLM research group headed by François Picard.

<sup>39</sup> [Patrimoines et Langages Musicaux, 2012a].

<sup>40</sup> [Patrimoines et Langages Musicaux, 2012b] and [Patrimoines et Langages Musicaux, 2012c].

<sup>41</sup> To develop the metaphoric use of melody as a journey, I use the term “stay” for the duration of a note.

<sup>42</sup> Thanks to the many doctoral students who develop their own analysis through *Monika/Psautier*: Jeanne Saint-Sardos, Shon Eun-kyung, Youssef Chédid, Julien Debove... and to my colleague Alice Tacaille.

<sup>43</sup> Bach is a genius, in that he is able to show the hierarchical nature of the scale, independently of the harmonic context, either modal or tonal.

<sup>44</sup> I never met a modal scale based on the fundamental note of a system (like *rāst* for *maqām* or *sa* for Hindustani music) with diminished or augmented fifth. For instance, *maqām Lāmī* as played by Munir Bachir can be analysed not as *do re<sup>b</sup> mi<sup>b</sup> fa sol<sup>b</sup> la<sup>b</sup> si<sup>b</sup> do* transposed on *Sol*, but as *do re<sup>b</sup> mi<sup>b</sup> fa sol la<sup>b</sup> si<sup>b</sup> do* with the apparent tonic being *Sol*. There is in fact a strong pedal on *Do*. Refer to [Bashir, 1971, track 7 – Taqām en maqām : Lāmī].

<sup>45</sup> See [Picard, 2001].

<sup>46</sup> [Marot and Bèze, 1563].

<sup>47</sup> As has been shown in [Picard and Roda, 2012].

<sup>48</sup> See also Colloque *Regards actuels sur la tonalité*, Tours, université François-Rabelais, 26-28 novembre 2009.

<sup>49</sup> How could I dare to write on modality without even quoting [Labussière, 1997, p. 110–111].

<sup>50</sup> We can suggest:

[Mansourov, 1975], reissued as [Mansourov, 1992, track 5]; [Mansurov, 1985, track 3], [Bismillah Khan, 1987, v. 19, track 1], [Omar, 1972, v. II, Adjām (track 2)] and [Keyrouz, 1989, track 1].