The Cyclic Concept and the Place of the Tone C in the Works of Josef Tal

In his autobiography Josef Tal devotes not a few lines to the manner in which solfège was taught at the Berlin Hochschule für Musik, where he studied, as well as the philosophy on which these studies were based. To quote from Tal: “Ear training and especially the development of relative pitch was achieved by an association between the tone C and the ear, comparable with the blood that circulates in the body.” This image of Tal’s provides an insight into his works, hinting that they (or at least some of them) are arranged in a cyclic structure in which C plays a special role.

In this article I shall try to give body to these hints, showing that a connection indeed exists between the cyclic structure and the centrality of the tone C.

On the score of his First Symphony (1952) published in 1957 by Israel Music Publications (IMP) Tal writes an introductory explanation which he concludes as follows: “The piece ends with a coda, thus completing the cycle!” About his Violin and Piano Sonata (1951) the composer explains: “The central idea in this work is the interval of the fourth. All the rest is the story of its (the fourth’s - Y.R.) life-cycle.”

The kind of cyclic structure Tal has in mind may be expressed in the simplest form, such as A B A, or in a more complex way, for example a structure whose ending is a retrograde version of its beginning, etc.

Tal’s Sonata for Violin and Piano (1951), for instance, is written in three movements. The third movement is a repetition (with certain changes) of the first, in other words the cyclic structure A B A.

The work “Five Inventions for Piano” (1956) consists of five sections. The final Invention is a variant of the first. The motive which opens the first
Invention and the entire work is repeated at the end of the final Invention (see also in the following), that is, A BCD A. In the Concerto for Cello and String Orchestra (1961), a twelve-tone composition in one movement, there are two blocks of musical material, A rhythmic and B flowing. The concerto starts with A material and goes on to B. Following episodes of development and reincarnation, which we shall entitle C, it ends in the reverse order, i.e. B and finally A. The overall structure of the concerto is thus: ABC--CBA. That is to say a cyclic-retrograde structure.

The dodecaphonic Duo for Viola and Piano (1965), opens with a linear presentation of the row played by the viola. The row then undergoes transformations, derivations and transpositions in the course of rhythmic changes. Towards the end, the original row returns, repeated in a linear form and with the same rhythmic groupings as at the beginning.

Another example is the Third Quartet (1976), composed of sections played on a time axis. The order of sections here is as follows:

A B C A D B E A D C B A

That is, the end of the composition is the retrograde version of its beginning (see also in the following).

This is the case with most of Josef Tal's works.

The organization of musical material in a work, as described here, is not unique to Tal. However, whereas for many composers organization tends to be architectural, Tal's organization of material is a function of his conceptual approach, which naturally also affects the architecture.

This cyclic approach, it would appear, derives from a comprehensive conception which also finds expression in the non-musical parts of his works, as well as in other endeavours of his.

In 1952 Tal wrote a short textbook entitled "Introduction to the Study of Musical Form". The book concludes: "With the discussion of this subject the cycle is completed".

Tal divides his autobiography into chapters which he designates "cycles", First Cycle, Second Cycle and so on. Each chapter-cycle begins at a point in time along the biographical line. From that point it develops associatively time-wise forwards and backwards, ending at the same point in time at which it began. A kind of small, local, life-cycle.

The composer's operas too (with the exception of the chamber opera "Amnon and Tamar") are built according to his cyclic conception, not only regarding the music, but taking in the whole opera, including the story, direction and performance.
Tal's opera “The Garden” (1987), which he wrote in collaboration with his almost permanent librettist Israel Eliraz, may be taken as an example. The opera is about the Garden of Eden or, more accurately, Paradise Lost. Eve nags Adam to leave the present world and return to the Garden of Eden, to the age of pure, innocent love. According to the stage directions, Adam and Eve emerge from the audience (this world) carrying suitcases and go up onto the stage - the Garden of Eden. But as Eve will soon discover, the wheel of time cannot be turned back and life-time progresses in one direction only. Her quarrels with Adam mount up until, disappointed and embittered, Adam and Eve pack their valises and return to reality, to the world they tried to leave - the audience in the auditorium, the starting point.

So much, for the moment, for cyclic structures.

Turning to the subject of the centrality of the tone C in the composer’s works, it may safely be said that even the untrained listener can’t help noticing this centrality, either because of the frequency of the tone’s appearance or because of its strategic placing in the architectural structure, or both.

Examples: Sonata for Violin and Piano (1951), “Structure” for Solo Harp (1962), "Verses of Remembrance" for Cello (1980) and other compositions begin on the tone C which is a kind of starting point, a reference tone, an initial step (see Exx. 1-4).

Example 1
Sonata for Violin and Piano (1951)

Example 2
“Structure” for Solo Harp

Example 3
Duo for Trombone and Harp (1989)

Example 4
“Verses of Remembrance” for Solo Cello (1980)
In the Duo for Viola and Piano (1965) based on a twelve-tone row, the first

tone in the row (and of the composition) is the tone C (see Ex. 5):

Example 5
Duo for Viola and Piano (1965)

Similarly in the opera “Ashmadai” (see Ex. 6):

Example 6
“Ashmadai” (1967) the twelve-tone row.

and also in Symphony No. 2 (see in the following)

In his Concerto for Cello and Strings (1961), the tone C is played in the

bass as an ostinato for the first seven measures (see Ex. 7):
The tone C is also one of the two tones (the bass) which make up the work’s central thematic motive. (see Ex. 8):
Example 8
Concerto for Cello (1961) - central thematic motive.

In Quartet No. 3 (1976), Symphony No. 3 (1978) and other works the tone C is the idea and the subject\(^\text{10}\) and is also the tone with which the work opens (see Exx. 9, 10):

Example 9
Symphony No. 3 (1978)
Example 10
Quartet No. 3 (1976)

The work “Five Inventions for Piano” (1956), begins and ends with a motive that includes the tone C (see Ex. 11):

Example 11

A remark is called for here. The tone C in this context should on no account be regarded as a tonic or any expression of tonality, even locally. Tal’s musical language is atonal! Period. Prof. Josef Dorfman has suggested calling this tone “a gravitational center”.\(^\text{11}\)

The connection between the tone C’s central position and the cyclic concept in Tal’s works discussed above was already seen, albeit incidentally, in his Sonata for Violin and Piano (1951), Five Inventions for Piano (1956),
Concerto for Cello and Strings (1961) and his Duo for Viola and Piano (1965). I shall try and show this more clearly by using two examples: Symphony No. 2 (1960) and String Quartet No. 3 (1976).

Symphony No. 2, as we have noted, is a twelve-tone composition. The first tone in the row of twelve is C. The structure of the row is as follows:

Example 12

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1 2 3 4 5 6 7 8 9 10 11 12
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The row, it should be pointed out, is played in its entirety only at the end of the work.

In addition to the row, Tal has fashioned a motive or short subject which he calls a “set”, which forms a kind of motto or refrain (see Ex. 13):

Example 13

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This motive is built on the first four tones of the row in retrograde order with the C dominant (its duration is longer than that of the others and the musical movement leads up to it).

Around this motive musical material takes shape - a whole musical section. This section begins with the C, the first tone in the row. It is played again and again, first by the bass, then by the cello and viola as a kind of ostinato (see Ex. 14):

Example 14
This section spans 20 measures (changing at each appearance), and is played three times during the symphony - at the beginning (the C in the bass is the symphony's opening tone), the middle and the end.

In his book *Until Josef* Tal explains that this section constitutes a kind of foundation column implanted three times during the composition, on which the bridge rests. The structure of the symphony can therefore be presented schematically as follows:

A B<------>B A C<------->C A

The composer's cyclical concept thus expresses itself in that at the end of the work we return to the beginning. Moreover, in presenting the complete row only at the end, Tal is saying in effect that there is here a return to the nucleus from which the whole symphony originated. The tone C signifies the beginning and the end thereby establishing the connection with the cyclic structure. Furthermore, following Tal's bridge metaphor, the symphony may be said to rest on foundation columns based on C. (C---> C---> C)

String Quartet No. 3 begins on C played by the first violin - a visual and audible fact. But its essential importance lies in its being the basic idea of the quartet. This idea (the tone C) played together with satellite tones surrounding it (C sharp, B, B flat) form the subject, from whose thematic material the whole quartet develops. These topics were dealt with by Tal at a meeting of composers held in 1988. Tal also maintained (at the same meeting) that from this subject, i.e. the expanded tone, he builds different structures, in exactly the same manner as with a classical subject.

The tone C as an idea, and its satellite tones - together forming a subject - are played at the beginning of the quartet for the duration of 40 quarters, lasting over 60 seconds. The playing encompasses changes of register and roles, including exits and entrances of the four instruments in a "kaleidoscopic" technique. This section, which is played for over a minute, is a presentation of the thematic material but is also the first structure characterized by a texture which could be called static (see Ex. 15):
The composer indeed goes on to build structures, each of which is characterized by a special texture, and all of which stem from or relate to the expanded tone. This treatment could be expressed by the use of typical intervals and their inversion, by using the tones themselves, i.e. C, C sharp, B, B flat, by sustaining the special sonority of this chord (a chord of minor seconds), or by juxtaposition of the tone idea, that is, a dense and dynamic texture which when played creates a new kind of comprehensive sound, etc.

The following are examples of the different textures which characterize the structures (see Ex. 16):

Each such structure occurs more than once in the Quartet and each reoccurrence differs from its predecessor as a kind of variant of the structure.
If we assign letters to the different variants and set them out in the order in which they are played in the Quartet, we obtain the following overall structure:

A B C A D B E A D C B A

This is a manifest cyclic structure, in which the end mirrors the beginning, but in reverse: (ABC CBA)

The connection with the tone C exists on two levels:

a. All the structures relate to and stem from the expanded tone around tone C.

b. The A structure which is also thematic material, having the tone C at its center, is to be found at strategic points in the Quartet’s architecture: at the beginning, a third of the way through, two-thirds of the way through and at the end – a total of four times; that is, more than any other structure in the work.15

In my view, the structure of the Second Symphony and Quartet No. 3 and the place of the tone C in them complement or form a logical continuation to the manner in which Josef Tal’s ear developed, as discussed in his autobiography (see above): “by an association between the tone C and the ear, comparable with the blood that circulates in the body”.

As demonstrated above, the cyclic concept and the centrality of the tone C in Tal’s works is a fact. Tal actually confirmed this (in a conversation with the author). His reasons for choosing this path are a matter of conjecture, a conjecture; however, that is fairly well-founded. It may have been an arbitrary personal choice. Or it may have been a choice influenced by the tradition and history of West-European instrumental music which after years of development established the scale of C major as the basic scale.

A further, quite plausible, reason is perhaps the influence of Paul Hindemith under whom Tal studied.

Many of Hindemith’s works are, as we know, cyclic, this structure being a logical and rational process according to German tradition. In his twelve-tone scale the tonic (C) is considered the tonal heart. Hindemith considers the tonic (C) as representing a solar system which exerts a gravitational pull on the surrounding elements.16 In his monumental work "Ludus Tonalis" the Prelude with which the composition opens returns in retrograde order in the postlude at the end. Thus Hindemith, after a cyclic-repeat motion, concludes on the tone he opened with (C). According to Giora Schuster, Hindemith commented on this as follows: “My beginning is my ending”.17

The following are the opening and closing passages of “Ludus Tonalis” (see Ex. 17):
A comparison between the beginning and the ending of “Ludus Tonalis” and the beginning and ending of Tal’s work for solo organ “Bekhol Hacavod” ("All Honor") composed in 1983 shows a great resemblance (see Ex. 18):

This resemblance reinforces our supposition regarding Hindemith’s influence on Tal, and the existence of the cyclic concept in his work.

In conclusion, it may be said with reasonable certainty that Josef Tal builds his compositions out of a rationale and a concept that their form
represents both a cycle symbolizing geometric perfection and completion, and the life cycle born from a kernel or one idea, which in many cases is the tone C.

Notes

2. The teachers of Solfege and Ear Training at the school were Prof. Charlotta Pfeffer and Mr. Siegfried Boris.
3. Free translation from the German.
4. From a conversation with the composer. The recording is in the Israeli Music Archives, Tel Aviv University Department of Musicology.
7. “The Garden” is a chamber opera for a limited cast lasting about 60 minutes. It was commissioned by Rolf Leibermann, Director of the Hamburg Opera, where it was premièred on May 29th, 1988.
8. Israel Eliraz, b. 1936, Israeli writer, playwright and poet, B.A. Mus. Hebrew University, studied Theatre at the Sorbonne University, Paris. His works have been published in Israel and overseas; some of his plays have been performed in Israel.
13. Ibid. (260-257).
14. See previous publication in this book: “The Tone as an Idea and a Subject in the Later Works of Josef Tal”.
15. The order of structures indicates a three-part structure. The present article does not go into an analysis of form.

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