

# Musical Foundation of Interaction

–Music as form and medium

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I would like to attempt to define the concept of music as a medium, with referring and interpreting the Viennese manuscripts by Alfred Schutz. Particularly interpreting Fritz Heider's idea of medium as distance perception, which Niklas Luhmann also had often mentioned in his later years, I intend to propose that we can use music as a fundamental medium, which can constitute and coordinate various social orders among time, space, action, lived experience, Thou- and They-orientation etc.

Furthermore, if I could say, I wish I would define music not only as one of lots of media but also as one of the most important media in our today's world.

## 1. Two temporal perspectives – 'monothetical' and 'polythetical'

Figure 1 is a famous cone model of the internal time by Henri Bergson<sup>1</sup>. The apex  $S$  contacting the plane  $P$  is always being continuing to renew toward the right direction. This renewal means a proceeding of time. With a movement of the apex to the right direction, the height  $h$  grows longer and longer, and the volume of this cone increases. This means an accumulation of the memory.

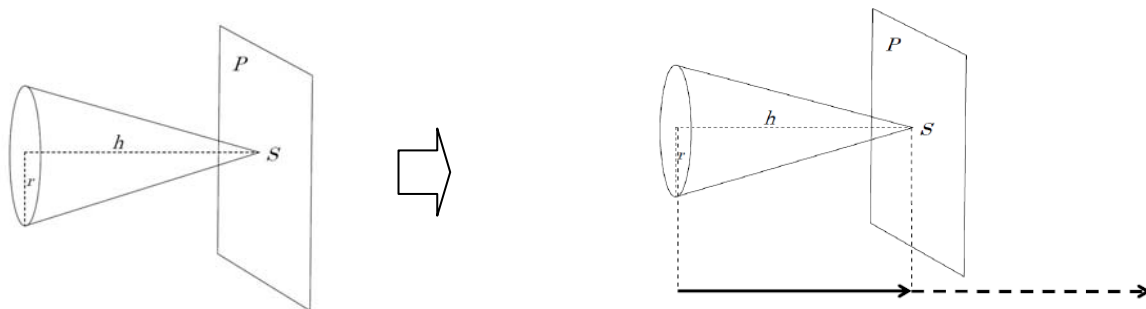


Fig. 1a

Fig. 1

If we think of only the proceeding of the plane  $P$  and the apex  $S$ , their track makes a simple straight line. It might be assumed even as a continuum of number line of time. Of course, I know that it is very different from the Bergsonian indivisible duration.

Schutz had discussed on the topic 'time' very variously from his Viennese manuscripts to the ideas of the 'world time' and the 'life-worldly time'<sup>2</sup> in his later published articles in English. However, I assume that he might presuppose generally a conception of time as a straight line so as to indicate

<sup>1</sup> Henri Bergson, *Matière et mémoire*, Quadrige / Presses Universitaires de France 1939, p.169.

<sup>2</sup> Alfred Schutz, *The Structure of the Life-World* (vol.1), Northwestern Univ. Press / Evanston 1973, p.46 f.

it. The three stages (past-present-future) proceeding model (e.g. 'Ich vordem', 'Ich im Jetzt' and 'Ich fortan')<sup>3</sup> also is included in this straight line model.

Such ideas might come from the modernized scheduled time in our business life, or they might more originally come from our 'practically limited' spatial environment (clothes, room, city, area etc.) and the 'periodical' events with the sun, the moon, the Venus (Morning star, Evening star) etc.

By the way, as for an accumulation of memory, I would like to mention another example. It is an example of 'hearing a prolonged whistling' in Husserl's *On the phenomenology of the consciousness of internal time*. According to Husserl, we can articulate four aspects on our hearing a prolonged whistling.

1. I have perception of the steam whistle or, rather, of the whistling of the whistle.
2. I have perception of the tone-content itself that endures, and of the tone-process in its duration.
3. I have perception of the tone-now and the tone-just-having-been combined with it.
4. I have perception of the consciousness of time in the now: a now-phase of the whistling and a continuity of adumbrations appear to me in this now.<sup>4</sup>

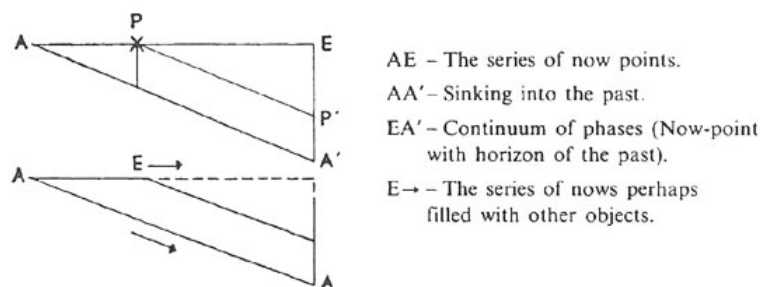


Fig. 2

Husserl also explains an accumulation of memory, using a figure (triangle) as diagram of time, which is similar to the Bergson's cone model.<sup>5</sup> A ray AE means a continuum of time. The accumulation of memory ( $\Delta AA'E$ ) also is dependent on the moving point E. And this triangle is filled with various elements of memory, e.g. lived experiences, behaviors, bodily movements actions and so on. Very interestingly Schutz also uses a very similar but more complicated diagram of time

<sup>3</sup> Alfred Schütz, *Theorie der Lebenswelt 1 – Die pragmatische Schichtung der Lebenswelt*, UVK Verlagsgesellschaft / Konstanz 2003, S.118 f.

<sup>4</sup> Edmund Husserl, *On the phenomenology of the consciousness of internal time (1893-1917)* (translated by John Barnett Brough), Kluwer Academic Publishers/Dordrecht 1991, p.117. The original German text: *Vorlesungen zur Phänomenologie des inneren Zeitbewußtseins*, Max Niemeyer Verlag / Tübingen 1928, S.465;

<sup>5</sup> Husserl (1991), p.29; Husserl (1928), S.388.

and memory in his manuscripts<sup>6</sup>.

We can understand that every element of them has to be theoretically distinguished from each other. However, although we could intend to use this diagram very simply, it will be very difficult to articulate lots of elements.

If we could use only the traditional scheme of means-ends-chain of social action, we could order all elements onto a straight line. But the Bergson's cone and the Husserl's steam whistle example show us the more complex contexture of life, in other words the spontaneous activity. With time's flowing the complexity within the cone or the triangle is increasing.

It means, a single ray cannot *monothetically* synthesize this complexity. This complexity should be considered *polythetically*.

The art is always related to this territory of spontaneous activity. "The meaning of a musical work is essentially of a polythetical structure. It cannot be grasped monothetically. It consists in the articulated step-by-step occurrence in internal time, in the very polythetic constitutional process itself."<sup>7</sup>

## 2. Music as form

We can learn lots of things from an article "The meaning of artistic form (music)"<sup>8</sup>, which very young Schutz wrote in Vienna. His analysis of the opera as a subject matter shows us the function of music. As his article's title shows us, each art has its own form. The opera also has it. Here I would like to concentrate on the function of music with following his analysis of opera. Because I assume that music has one of the most important characteristics in depicting and expressing our human spontaneous activities.

The opera consists of drama and music. The drama consists of performances (acts), lines (words), characters (persons). Through these components various ego-alter relations are incorporated in a work: as author-actor (actress), actor (actress)-actor (actress), actor-spectator, author-spectator relation etc. In this point the drama may exist as model of a society. However, the dramaturgy itself is not any sociological methodology. Every drama is full of imagination. "The really accomplished act is irrevocable and the consequences must be borne whether it has been successful or not. Imagination is always revocable and can be revised again and again."<sup>9</sup>

Even if we can see the interaction model incorporated with acts, words and the ego-alter relation

<sup>6</sup> Alfred Schütz, *Sinn und Zeit – Frühe Wiener Arbeiten und Entwürfen*, UVK Verlagsgesellschaft / Konstanz 2006, S.84.

<sup>7</sup> Alfred Schutz, "Making music together" in: Alfred Schutz, *Collected Papers II – Studies in Social Theory* (edited and introduced by Arvid Brodersen), Martinus Nijhoff / The Hague 1964, p.172.

<sup>8</sup> Schütz, „Sinn einer Kunstform (Musik)“, in: Alfred Schütz, *Theorie der Lebensformen* (herausgegeben und eingeleitet von Ilja Srubar), Frankfurt am Main 1981.

<sup>9</sup> Schutz (1964), p.77.

in the drama, every play is different from our everyday life itself. The original meaning of existence of dramatic art is that we can realize something by our imagination 'more really' in a drama than in our everyday life.

Differently from the drama itself, the opera is accompanied with music. Therefore, Schutz intends to clarify some characteristics of music. Some arts like dancing, motion picture etc. are expressed with the continuous diversity or diverse continuity. In the case of dancing each bodily movement expresses the continuity and diversity. In that of motion picture each frame does them. Most of these arts also are accompanied with music.

Music also is expressed with the continuous diversity. However, it is related to the sound (wave), while the continuous diversity of the dancing and the motion picture are related to the light (wave). "The light which is incoming in the cathedrals becomes the form to be able to play with the columns and curves".<sup>10</sup> The architect designs the objects and he (she) transforms the light into a form of art. Composers and musicians do it with the sound.

In the late 1920s an Austrian psychologist Fritz Heider took up two fundamental pair concepts 'sound-air' and 'light-aether' (later 'light-space') in the subject.<sup>11</sup> Luhmann also follows this conceptual orientation in a rigid frame of social system theory. However, I would like to develop it more in the theory of distance perception in Heider's original context. I would like to interpret music itself as medium and as form.

Of course, "Music is the lonesome art."<sup>12</sup> Today each person can enjoy music alone with each own i-pod. Such a pleasure can be interpreted as musically lived experience. We can realize the spontaneous activity of fantasy only in the world as lived experience. "Music is an event of our inner world. But it is proceeding independently of the events of our life."<sup>13</sup>

Let's sing *Little Rose on the Heath (Heidenröslein)*. I try to display the phrase in the score and lyrics.



Fig. 3

We can describe the melody of our humming by the score. However, even if we don't understand this score, we can hum this melody by our own memory, because we can remember this

<sup>10</sup> Niklas Luhmann, *Gesellschaft der Gesellschaft*, Frankfurt am Main 1997, S.197.

<sup>11</sup> Fritz Heider, *Ding und Medium* (herausgegeben und mit einem Vorwort versehen von Dirk Baecker), Kulturverlag Kadmos/Berlin 1926/2005, S.23; "Thing and Medium" in: *Psychological Issues*, Vol.1 (No. 3), 1959, p.1.

<sup>12</sup> Schütz(1981), S.295.

<sup>13</sup> Schütz (1981), S.291.

melody as sequence or as unity.<sup>14</sup> It does not matter often whether the first tone is a tone of B or a tone of 'ti'. We need not know that the frequency of this sound is 466.16376151808991640720312977639... Hz. This score has a one-eighth rest mark. In spite of this rest mark this melody is continuing, because we grasp this melody as unitary with a one-eighth rest.

Most of old Japanese know this melody very well with its song lyrics translated into Japanese. They can imagine a scene "Sah ein Knab ein Rößlein stehn, ..." It means that we can understand a scene and call it up as unitary to mind with melody and lyrics.

Lyric is expressed by words. However, Schutz says, "When we listen to the last movement of the Beethoven's 9<sup>th</sup> symphony, we never listen to Schiller's poem. The sung poem has nothing more in common with the spoken and read one."<sup>15</sup> According to Schutz who follows Nietzsche in this article, "The original musical basic mood exceeds the birth of song by poet."<sup>16</sup>

This "*Little Rose on the Heath*" is composed very simply in one-four time. But if it is done in one-thirty-two time, the image of scene where a little boy is seeing small roses must be very different.

The melody is a unitary event which is generated and is disappearing as a flow of real life. Therefore, it is hardly objectified and plotted onto a temporal axis of number line. On the contrary, "the rhythm is obviously nothing else as the distribution of a melody in space-time".<sup>17</sup>

An ambivalent relation between the melody and the rhythm depends on two-facedness of the rhythm. On the one hand, the musicological rhythm can be even mathematically expressed. On the other hand, the rhythm of a poem and its words is very closely related to the bodily movement and the mental feeling. The phonetic element of this rhythm 'ain' like "Sah ein", "Knab' ein", and "Röslein" etc., that exists in German original text, shows us a rhythm of this poem. We can imagine a kind of space-time with the repetition of 'ain'. It is neither any Euclidean space nor any Newtonian time, but it is a lived space-time. It may not be a rationalized space-time but an imaginary one.

"Rhythmical ordering of words is accompanied by the bodily movement; verse to verse, foot's pace of walker, talk's pace of speaker. Such the rhythm comes from a temporal dimension and it is unfolding into a spatial dimension. We cannot sing a song without such the rhythm."<sup>18</sup>

It means, the words of which this poem is composed are originally already musical. "Lyric poetry is always assuming the word under the music. Therefore, we know the form of stanza (the

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<sup>14</sup> Later Schutz says, "Two melodies are never heard simultaneously" in: Schutz (1964), p.182.

<sup>15</sup> Schütz (1981), S.294.

<sup>16</sup> Schütz (1981), S.297.

<sup>17</sup> Schütz (1981), S.295.

<sup>18</sup> Schütz (1981), S.297.

form of strophe).<sup>19</sup>

This half-transcendental characteristic of music depends very strongly on the duality of the rhythm of words. Therefore, the composer makes music after reading a poem. And inversely, if we assume a relation between the rhythm and the bodily movement, at the same time, if we assume that music as medium can develop the lived time-space, very paradoxically the composer can design music very rationalistically. So, it may be possible to design a melody and a harmony from words on the base of a rationalistic objectified axis of time.

The language expression has two aspects. Firstly it is related to the meaning, which is conceptually inherent in words themselves. Secondly it is related to the sound of voice in speaking or singing, which mediates the emotion that expresses itself in words. For the poet the original vocal mood may precede the song itself.<sup>20</sup>

The composer can catch the nature of rhythmical and melodic stimulation from a few words. We know that the musical basic form is not only coming out of the intellectual content of meaning, and that it is not only coming out of the outer or inner rhythmical sequence of words, that it is coming with some kind of metaphor.<sup>21</sup>

Not only the sound of words but also the metaphor of words can make a clue for composing the poem and the piece. Some natural objects also are creating acoustic events. With such rhythms various melodies are found. And with this proceeding musical constitution a spatial and temporal dimension appears.<sup>22</sup> Musicians try to describe some processes musically. But it can develop not only some acoustic aspects but also lots of visual ones with music.<sup>23</sup>

### 3. The meaning of opera

It is well known that the meaning of the chorus in the Greek tragedy was discussed by Nietzsche. Schutz applies this subject matter to the opera. That is, the role of the orchestra in the opera is a substantial succession of the role of the chorus in Greek tragedy. Our everyday life is certainly different from the world on the stage that the orchestra is performing. However, we are going to understand a progress of stage as a result. As pointed out by Nietzsche, the chorus in the Greek tragedy was not any ideal audience but an ideal interpreter of the stage progress. The musical character of orchestra, which is a successor of chorus in the Greek tragedy, exactly pulls us apart from the stage, and at the same time it is reconnecting to the stage. We are re-embedded into the

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<sup>19</sup> Schütz (1981), S.297.

<sup>20</sup> Schütz (1981), S.297.

<sup>21</sup> Schütz (1981), S.298.

<sup>22</sup> Schütz (1981), S.298.

<sup>23</sup> Schütz (1981), S.298.

stage with music and drama.

Music makes actors' (and actresses') performances articulate each other. The meaning of word, which they express, is not so important. More important is that this musical mood which the orchestra is performing is inherently related to the internal duration of the audience.

"Mozart just composed no figures, no characters, no action and, hence, no drama. He composed only situations, in spite of all individuation which he gives his figures on each scene and each situation. (...) On the other hand, the ideal of Wagner was a myth as the tragedy, and a true myth. In his poetries something miraculous takes place always. It is just this miracle that he composes."<sup>24</sup>

It is not important who is more excellent, Mozart or Wagner. Rather we have to find two important typical models that music accomplishes in the opera. Certainly I assume that Schutz preferred Mozart to Wagner for his later works, because the theme for Mozart's Operas was nothing but various aspects of the Thou-orientation in a situation.

In the case of Wagner, with exception of the quintet in the *Meistersinger von Nurnberg* and of the duet in the second act of *Tristen and Isolde*, each individual person as a hero is to be found only successively. In the case of Mozart it takes everything in our world. His theme was not any lonely world where only one person lived, thought and acted. His theme is our world where we can and must live, think and act with together. Therefore, the theme of Mozart's composition was not any love but the knowledge around Thou and its environment.<sup>25</sup>

For Mozart our immediate and primordial world is constituted with the internal lived experiences of the other. This was the fundamental problem for the Schutzean interpretive sociology and the constitutional theory of social world.

#### **4. Music as medium**

Money has been well-known as symbolic media. Its form is assumed as the general exchangeability. The substance of money as medium itself has been changing from the earliest time. Historically the gold was the most important substance. However, if you know a history of money, it is possible to point out various substances; shell, stone, cloth, tobacco etc. Since the last decay of the 20<sup>th</sup> Century it has become the electronic signal.

I would like to propose that music is a medium. Its form is the temporal constellation between perceptive and bodily lived experiences. It accompanies a newly unfolding of space. If we follow Mozart, it is found as a simultaneous (or quasi-simultaneous) lived experience with the other(s). As

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<sup>24</sup> Schütz (1981), S.305.

<sup>25</sup> Schütz (1981), S.308. cf. Schutz (1964), pp.183 f.

for Wagner, it may be a lived experience of belief, miracle, and relief by the hero. Both of them come from the spontaneity of fantasy. Therefore, nobody can control this territory with music as medium. It is very similar to money as medium. It means that nobody can control every economy perfectly with any quantities and qualities of money. However, every economy cannot exist without money as medium. Very similarly various perceptions and actions cannot be ordered without media, for instance music.

- Music as medium creates the spontaneously ordered lived experiences which are composed of the sensory perceptions and the bodily movements.
- Three elements of music are melody, harmony and rhythm. Their specific constellation becomes a form.
- The sensory perceptions and the bodily movements can be closely related mutually by the duality of rhythm.
  - The even interval perception as lived experience (e.g. breath, blink, step, beat) constitutes a primordial rhythm, which creates each elementary subjective temporal axis.
  - The melody is related to the elementary subjective temporal axis indivisibly.
  - The harmony is related to the tones put on the elementary subjective temporal axis vertically.
- The sensory perceptions and the bodily movements might be pointed on the temporal axis. But more important is that they can be developed and unfolded to a (outer or inner) space with music as medium.

The difference between the form of music and the medium as music is logically assumed as a form. The self-reference of lived experiences is certainly closed. However, it can be interrupted by the specific difference between the sensory perception and the bodily movement. The bodily movement always accompanies the sensory perception, and can be distinguished from it. This paradoxical relation causes an interruption of the self-reference of lived experiences. This interruption makes music as medium possible.<sup>26</sup>

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<sup>26</sup> Schutz says, "It is melody, which plays the same role in music that design plays in painting: melody creates the contour; the chords, the harmony, furnish merely the color" (Schutz 1964, p.182). I would like to assume that painting also is a medium.