S.: I remember how I imagined the work for the first time. It was very friendly of you to come especially to listen to the music of SONNTAGS-ABSCHIED (SUNDAY’s FAREWELL) and HOCH-ZEITEN (HIGH TIMES*) for choir. I prepared the two 8-track machines once again for this morning, one for the click-track, i.e. the layers for synchronising the five musicians, or as in your case, the five dancers and the other with the five tracks of the music from SONNTAGS-ABSCHIED. This composition also has five layers, five languages and is written for five different choirs, first soprano, second soprano, alto, tenor and bass. The five synthesizers I decided to use are played by five musicians with whom I regularly work. All of them are pianists. They didn’t know, that is, three of them didn’t know how they should design the sounds. So I had to think of a way to make them understand the five different sound characters of the individual layers. That is why I wrote in the score here, as you know … oh, by the way: did you use it?

P.: Yes, I always have it with me.

S.: It shows the solos very nicely, where all five layers are synchronised, where we have a solo, a duet, a trio or a quartet.

P.: No, no, that is very practical, because it is very easy to recognise the course of events, how things work together, and that makes it possible to work very exactly. That is very good.

S.: Or if you want to work on a single layer, you can easily recognise whether they are synchronous or not.

P.: Exactly! But I prefer to work on all layers at the same time. It is still helpful though, to be able to obtain an analytic overview of the work, and that is made possible by the score. The idea of an organism is very important to me, as you put it yourself, the idea of the piece as one unit, within which it remains formally consolidated.

---

*The German word for marriages is Hochzeiten. With a hyphen it takes on a double significance indicating that a wedding day is a high time in one’s lifetime.
S.: It is very difficult to perceive everything at once with the eyes, because the dancers’ movements are so synchronous that I wonder how they do that. That might be possible for a pair, but how do you manage to follow the movements of all six dancers?
P.: Yes, of course. For you it is the sounds. I wonder how you manage to synchronise all of them.
S.: I have conducted often, many times pieces with several different tempi. The main aspect of this composition, and that is what has primary importance for me, is the layering of five different tempi, from 30 beats per minute up to 180 per minute. There are seven tempi between 30 and 180, 30, then 40 per minute, 53.5; 71; 95; 134; 180. They are metronome tempi, as we call them, and thus I always have the possibility to choose five of these seven tempi in order to give single tempo groups a predominant character, focussing on the faster, the slower, the fastest possible or the strong opposites, etc. As an aid to the musicians who don’t know how to work with the timbres, the texts are printed in five different languages in the synthesizer score. They are love poems in the five languages Indian (Hindi, also Sanskrit), Chinese, Arabic, English and the fifth is Kiswahili. Because of the phonetic characteristics of these languages, the sounds that are produced when speaking. It greatly helped the musicians in developing the timbres for the synthesizers.
P.: Yes, the sound structures....
S.: Yes, yes. I even produced five tapes for them that they can listen to individually in order to imitate the sound of the languages. Otherwise I would have had to write numeric indications, but how could they use numbers with the synthesizer? They developed five very different types of sound. The other problem was: How can I synchronise the five musicians? I produced a click-track tape for this purpose and recorded all the bars and beats in each bar for the entire piece (35 minutes) in my own voice. Thus, each player has his own click-track. He is able to listen to the click-track that is absolutely synchronous with the five sound layers over small, unnoticeable earphones. And I had the idea from the very beginning, when I wrote you asking whether it would be possible someday to add a group of dancers, each of which would hear his beats, the beats of each bar, over cordless earphones. My dream is to expand this principle further, as I have already told you. I composed COSMIC PULSES this year, a piece with 24 different layers, all in different tempi, but the differences in tempo are extreme, between 240 and 1.3 beats per minute, which is extremely slow. And
between these extremes I have chosen 24 different tempi. It could be done with 24 dancers, but one would have to have quite a large area for the dancers to be able to spread out. And each would hear the beats of his own tempo, and one would be able to see a truly astonishing organism, like 24 planets in a solar system that move independently of one another, each in its own rotating speed, but also coming close to each other, like in the piece that you have just done. That is a dream that I have, that humans are able to realise music visually, make it visible, or, the other way around, to make what visually falls apart into different tempi audible as a unified whole. Because in the end, this all reaches our spirit, and the spirit is not either eye or ear, it is an undivided whole.

**P.** Yes, that is correct.

**S.** And that is what it is all about, to transform temporal polyphony into spatial polyphony.

**P.** And also polyrhythm.

**S.** Yes, exactly.

**P.** It is like life. I think it approaches processes similar to life, like completely natural things. When the leaves on the trees move, they move in different rhythms, so to speak with different beats, and altogether it still appears as a unified whole.

**S.** Yes. We are not yet able to perceive....When I heard the result, I thought: Oh God! I have to listen and check this again and again, because I am gradually able to hear mistakes. The computer can also make mistakes. Then it isn’t right.

**P.** When the computer has made a mistake, does it ever happen that you keep the mistake, that you use it? Or do you correct it so that you really obtain what you had planned?

**S.** No, I prefer to correct it. I have experimented so much in order to realise particular things in the score that I don’t want to have any mistakes in it at the moment. Of course I have worked so much in the area of intuitive music, and the arbitrary, if one wants to call it that, can be very entertaining. But I use it very seldom in my works. In this work also, by the way.

**P.** Yes, because you have a pronounced idea of music as something composed, i.e. you are convinced that it is something that is constructed, that is articulated like a well-defined language, and, yes, emerges from a thought.
S.: Yes. I think it is necessary that humans who live after my lifetime can study what a composition is – even without me. It remains the same composition when I am no longer here. And the composition is an indication which shows those who follow me how far a human in 2007 had progressed along the path to exhausting the possibilities of our senses, our perception, space music and layering different tempi. That also has something to do with my conviction that I do not cease to exist when I die. I would like to continue on as a composer, I would like to compose all the planet and solar systems, because I think that composition is a preparation to enable one to work in microscopically small as well as macroscopically large dimensions, in outer space with all these moving heavenly bodies as well as in the world of micro technology. While I was working on my last piece, I heard a documentary on nanobots. Have you heard of them? The nanobots are – it is unbelievable. Several medical doctors have now found a possibility to travel through the human organism on a molecular level in order to repair damages to a certain part of the body. They are extremely small, but it is possible to build such small moving objects. That is this other world that has to do with the synchronisation of diverse rhythms in the human body.

P.: Why is this work called SONNTAGS-ABSCHIED?

S.: I composed seven operas for the seven days of the week. The last, the last part is called SONNTAG aus LICHT, and SONNTAGS-ABSCHIED is a summary at the end of the five scenes of SONNTAG aus LICHT, when the audience goes home. A sort of farewell music is played either from loudspeakers, or in this case by five synthesizers, that recapitulates some important principles of this opera LICHT. One possible form would be, as it is suggested in the foreword incidentally, to play SONNTAGS-ABSCHIED in the foyer while the audience leaves the auditorium. Next to the synthesizers or groups of loudspeaker pointing in different directions, it would be possible, as in your case, to have a ballet distributed on different podia throughout the foyer, but synchronous, and that is what I find unbelievable, without looking at each other!

P.: It is strange: When that was implemented, when that was implemented by all these people from different language groups with the help of computers, I quickly got the feeling that they were extraterrestrial, as though all these people came from other stars, from other galaxies.
S.: That is because the meaning of the words ... as I said, these are love poems, but the meaning of the texts is something that interests us humans, while the phonetic characteristics are completely abstract.

S.: That is not limited to one nation, it is not limited to one planet, it is something that exists for itself and out of itself. Like the sounds, and that is why a sound cannot be translated, or it is ridiculous to want to translate it into a language. In that sense, you are absolutely right. Sometimes... when I arrived in Japan for the first time, I thought I was on a different planet. I didn’t understand anything and I tried to imitate what they said phonetically without really understanding.

P.: And without making a sensible statement.

S.: Yes. Ah, a question! What did you do with the different instruments played by the synthesizer players with the function of time markers, i.e. the Rin, the four Rin for the second group, the antique cymbal for the first group, the four Rin, the four bells and the four gongs and plate bells?

P.: We use them, the dancers use them as acoustical and spatial orientation points. Absolutely and always. And it is strange, because everything is so strongly laid out in waves that the dance... the dance is completely different than in HELIKOPTER, it is very much... the bodies move in waves, the movements are very wavy in this piece.

S.: That is true, because they already have to perform glissandi at the beginning and then again and again, the consequence of which is that the movements become much more sinuous.

P.: Exactly. I have tried very hard to express how sounds affect the body. It is as though one would inject the sound into the body. But what effect does that have on the body? I work with this optical effect very much. Which is not an easy task, by the way. You confronted me with a truly difficult task. (Laughs) I don’t think that one can deal with your music by pretending it doesn’t exist. There are perhaps choreographers or choreographic ideas that are based on music but then do something completely different, that solely artistically use the duration. But I think that would be very less good.

S.: That is done very often. Even Béjart, who interpreted pieces of mine several times. He was a choreographer who worked with associations, i.e. he had emotions, associations, and implemented them in the movements of the dancers, but that only matched the music here and there. He only used the music as a mood factor.
P.: An atmospheric approach, not a structural one.
S.: Not structural and not in coordination with the composition in terms of polyphony, synchronisation, and above all, the irregular tempi. I think that art has become very irregular since 1950. Not only in the area of aleatoric music, where nothing is foreseeable, but also in music with a fixed metre. I began to use tempi with changing time signatures very early, and also time intervals with changing time signatures and irregular accents within the time intervals with changing time signatures. That is also a historical phenomenon of human development. In his entire perception, in his thinking, the human being tends more and more towards irregularity, he frees himself more and more from traditional concepts, which are based on the principle of regularity. Not only the army and everything that is constructed according to this periodic principle belongs to the past, but also all the devices from our machine era are based on irregularity. And I think that is good, it makes it necessary for human beings to change the tempo often, very often.
The solos are very important to me in your interpretation. For example the first solo in Group 3. I have the groups 1, 2, 3, 4 and 5 in the loudspeakers. I am interested to hear the third group, which is alone for a moment, after all five have played at once. Let us begin with minute 1 [music]
Or the other place, an extreme case in this piece and very rare, that all five are suddenly together. But I think I already know how you will synchronise all of this. How many dancers were you thinking of?
P.: There are twelve dancers. That is a lot, but the dancers are not always all on stage at the same time. And the moments like this one are especially energy-laden, very intensive.
S.: Here. [music]
P.: What I hear is so dense and rich. And that is exactly what is difficult about your music: one must be able to transport an immense amount of complexity onto the stage. I said that to a journalist recently who asked me: “What does it mean to you when you work with Stockhausen’s music?” I answered: “It means unfurling complexity.” It is often the case, especially nowadays, that people want to have something minimal; they are partial to minimalism. Minimalism produces something beautiful in a very simple way and very quickly. One makes something very simple, and it is beautiful.
S.: No, it is not beautiful.
P.: (Laughs) I almost want to say it is the trend and is seen as being modern to do this. One produces a minimum, almost nothing, and it is beautiful. It is really true, many are completely taken by this trend, this utopia... What fascinates me is this complexity that you unfurl without end. You are more a maximalist than a minimalist.

S.: OK, I know that many people are attached to philosophical ideas that strive towards silence, towards nothing, emptiness. One has to allow that; they need it in order to quiet down their spirit. In the last 50 years of the composition of music, however, there has been a strong development towards expanding the tempi, the space and the timbres. For the first time in the history of mankind, we have the possibility to compose timbres inside the sounds, to synthesise them. This is a new way of thinking. Music is both science and art, because we constantly discover new conditions of acoustical listening that we can perceive. That is highly interesting.

P.: That is exactly the reason why it is so difficult to work with your pieces, because it forces me as a choreographer to develop complexity in the bodies.

S.: Sometimes the gesture is now actually connected to particular timbres and cannot be arbitrary, moreover it is rhythmic and often newly invented in its synchronous character. They are still hands, body, feet, but one can do something with them that imitates animals, the wind, etc. But the gesture can also connect to musical details, to rhythmic details and timbres. This cosmos of gestures is just now in the development stage.

P.: Oh yes, I agree with you completely! Exactly! I am very happy that you say that, because I will never tire of pointing that out. I say over and over that we are at the beginning, that something new is beginning in choreography. The history of choreography is very much older than the history of dance as an artwork.

S.: Yes. Our compositional technique offers little in terms of dynamic scales, timbre scales and spatial sound, while it offers more in respect to pitches, durations and rhythm. That is also because the musicians cannot play the irregularity; they are not able to play one third or two thirds of a unit. But it is slowly coming along. I have a passage here with two alternating groups, and the way it develops is very interesting. [music]

P.: Yes, that is the kind of moment when one has the impression of a dialogue that evolves between the dancing groups.

S.: It would be nice to have a large auditorium with the five podia, and sometimes they come together, and then separate again.
This way, one can use the room creatively: One group in one corner of the stage and a dancer here and there. One can also, and I do this often in this piece, use different levels as a creative tool. Some dancers dance standing up, others laying on the floor, and this way they have a dialogue.

S.: Yes, yes, yes. When I saw the film of HELIKOPTER-STREICHQUARTETT (HELIKOPTER STRING QUARTET), I asked myself if it wouldn't be possible to have a ballet dance on different levels by using podia constructed so that they move up and down individually, then stand still, only to begin moving again. That would be fantastic.

P.: That would be fantastic, yes. One would have to have the technical devices to do that.

S.: Would that be possible?

P.: I think so.

S.: With flexible podia that can be moved up and down.

P.: Yes, yes.

S.: That means one would have podia constructed so that they would move up, etc., then this structure could disappear and all of them would be on the same level.... Would you like to hear the last part?

P.: Yes, sure.

S.: 32.58 [music] In order to synchronise a part like this, you should use....

P.: ...the click-track...

S.: Yes, the click-track for each layer. I spoke about beats, the individual beats of each bar, and for the performance of this last part – I am beginning here at 33.21 – I even published a CD with a stereophonic mix of all click-tracks. That is absolutely....

P.: That is what I just wanted to tell you, I like it very much. I listened to it once completely, just for fun, yes really.

S.: You did....? That is unbelievable!

P.: Yes, and I think that is very good. I like it. It is almost a complete piece in itself.

S.: Like living robots in a machine world. Unbelievable! – OK, I will play only 32 seconds for you... first only layer 1...[music] And now all five. A curious effect. [music] It is like a body with its many different vibrations: the breath, the heart, the brain, the kidneys, etc. Those are very different rhythms.

P.: The body functions, the nerve system, the heartbeat, the breathing organs, yes, yes.
S.: And they are very different, these functions. Unbelievable! That is interesting. Music has become as varied as organic living beings, the human body, plants, planets, and so on. I have some musicians who are able to play chromatic tempo scales, musicians who know exactly whether their pulse is 71 or 82 or 63.5.

P.: Similar to musicians who have perfect pitch, except that it is in terms of a time measure.

S.: Exactly! And I have four musicians who are capable of that if they have worked and rehearsed long enough. So, if I say: 80, please.... (counts), 113.5... (counts), 63.5 ... (counts)...

P.: Aren’t you perhaps able to do that yourself?

S.: Yes, yes, that’s why, yes.

P.: Aha, yes of course!

S.: I practiced that long enough in 1958, because I had composed a piece for three orchestras, and I didn’t want to hear anyone say that I make mistakes. That is why I practiced every morning for one and a half hours with the metronome for three months. I practiced my part. And when the rehearsals began with Pierre Boulez and Bruno Maderna, who conducted the piece with me, I wanted to be sure that I wouldn’t make a mistake. Boulez was always too fast, Maderna too slow, and then they argued with each other. But I had prepared myself and had practiced the 12 tempi between 60 and 120 and their multiples of 2.

P.: That is sisyphus work.

S.: No, yes and no. You can train it. And I think in the future, dancers must also be able to move rhythmically corresponding to exact metronome settings.

P.: But they do that already. They do it, but they are not conscious of their time measure being 120 for example... But I have noticed... During the work on HELIKOPTER it happened that I worked with them on one sequence, and then they repeated the sequence in the exact same time without any help. If it lasts 27 seconds and we dance it without music, they make the movements and are finished in exactly 27 seconds. There is therefore a kind of muscular time memory.

S.: There is something else that we have not yet spoken about: The action of exchange. When I composed the piece, I also had an idea of the groups. It is an opera scene, a scene of SONNTAG aus LICHT. At the moment, there are five synthesizer players, and I imagine that visitors arrive in the form of dancers. From time to time, a dancer moves
from one place to another and visits another group, and he even brings presents. They could be symbolic or concrete presents. That seems to me to be especially interesting in the interpretation of this music, these visits between the groups. Here for example there is an insert from another group in the second group, an insert of Group 4 into Group 2 and vice versa. But there are other, many other sections, in which the rhythm and the dominant tempo of one group is transferred to another. And it would be very desirable to make that visible. Because it is very difficult for people to perceive that purely acoustically. But with a ballet, you could very nicely show that. So the dominating gestures, the dominating rhythms shift from one place to another and vice versa.

P.: Yes, exactly! Like a contamination, an exchange of energy.

S.: An exchange. It could be very interesting to give a utopian example that such different groups are able to exchange characteristics. And then one understands: aha, that is the future in which we all will participate.

P.: Was that the reason, or were there other reasons why you wanted to have this piece in particular choreographed?

S.: No. The main reason was that all the ballets I have ever seen in my life were always ballets in one single time measure. I have never seen a ballet with several different clearly recognizable tempi. And I thought it would be best to give each dancer his own click-track, his own time measure, so that the different superimposed tempi can really be followed. Before our meeting, I thought about how the interaction of music and what is normally called ballet, choreographic art, could be developed in a future-oriented way. Not only with the goal of finding new variations, to develop a distinct style. Style usually evolves by the process of elimination: I won’t do this, I’ll do this. One can do it that way. Another possibility is to take major new discoveries into account. This week a new planet was discovered. It is not large and it moves a bit differently, its rotation period is 16 hours... imagine that – the Earth’s is 24 hours. What does that mean for us? It means that we become aware of how the universe is built, how living beings are built. I say “built” because I think about the builders who made them or who make them over and over again. Art can contribute to expanding this consciousness, and that is more important than to entertain. I am an admirer of Gagaku. I have composed for the Gagaku-Ensemble in Tokyo. But it is the same as with our Baroque music or music of the middle ages: it always stays the same; it doesn’t develop further. In Europe,
however, we can continue to develop every kind of art in accordance with the new consciousness on the basis of the expansion of our senses...

P.: Without a doubt.
S.: ...of the ability of our ears to listen, the ability of our eyes to see, to analyze what we see and to compare single appearances and so forth. You are the first one who has made productions, which make me wide-awake and which say to me: here is someone who is working on this. The body is an instrument like a musical instrument, and that is very important. Do you see a development in your profession that is attributable to technical developments?

P.: The technique of dancing?
S.: No, no, technical developments in general. I don't know – technical machines, visual processes, video... I don't know.

P.: The obligation I put upon myself, to work very closely with the pieces I use, for example SONNTAGS-ABSCHIED, forces me to find new solutions, new structures. There are things in the dance scenes that I made for SONNTAGS-ABSCHIED that I have never done before with the bodies of the dancers, and which are very closely related to the wavy sound structures. That is new. My choreographic language of forms has developed by working on this piece.

S.: Sometimes one is forced to forget everything one has learned.

P.: Oh yes!

S.: What should you do, for example, if you have a performance in a concert hall, and you are not allowed to have players in the audience area. That has happened to me very often in the last 30 years, especially with LICHT. In Leipzig, for example, I realised an opera, DIENSTAG aus LICHT, and I wanted individual musicians to come through the audience area as invaders, entering from the left, the right and from the rear. Aisles had to be laid out in the auditorium with neon lighting from below, and that was difficult at first, because they didn't want anything to take place in the auditorium. Already in the first opera, I wanted Lucifer to enter from the first row and be lowered with a hydraulic device onto the stage and then begin his dialogue with the tenor. And now in ABSCHIED, how would it be if a dancer suddenly walked through the audience? People would ask themselves, what is he doing here? Because he comes down to the audience level, and that is a strong effect. I have done that often, invasions in the audience, in the
auditorium, with processions of musicians. Maybe that will be done more often in the 
future.

P.: What gave you the idea of the four helicopters?

S.: Haven’t I told you?

P.: No, you never told me about it.

S.: Well, I woke up one night and had the feeling that I was floating in the air, and there 
was a helicopter below me and I saw musicians inside. I thought, strange, what is that 
supposed to mean? Whatever, I didn’t forget it. The next morning I noted: Helicopter in 
the air with string instruments. I drove to the studio in Cologne where I was working 
every day, and in this studio there is one window, about 12 metres long, and one has a 
beautiful view of the Rhine, it is located close to the river. I enter the studio, and there... I 
think, what is that? A helicopter appeared in the window, then a second, a third, a fourth, 
and they disappeared on the other side of the window. Then my decision was made: I 
will compose this piece. I had a composition commission from the Salzburg Festspiele, 
and I said, OK, I will compose a string quartet, a traditional string quartet for the Arditti 
Quartet. I didn’t say anything else. I finished the score – I didn’t want to lose the 
commission – and sent it to Salzburg. They read it, and then it started: what is he talking 
about? He has gone crazy! Arditti rang me up and said: Stockhausen, wow! I asked: 
what does that mean, “wow”? He said: That is unbelievable, how can we play while we 
are flying? I don’t know. Then they started searching for helicopters at the Austrian 
military, but they were too heavy, too loud with extremely loud motors. Finally, after they 
had searched for two or three months without avail, the director of the Vienna Opera, 
who was very powerful at the Salzburg Festspiele, decided: The piece will not be 
performed, we won’t spend any money on it. There was a political group in Salzburg, the 
“Greens”, and when they read that Stockhausen wanted to perform a piece for 
helicopters, they said: it is out of the question, this piece will not be performed in 
Salzburg, never! They missed the chance, paid for it and missed it. Then one day, I was 
talking to Jan van Vlijmen from the Holland Festival about it. I said: Jan, I have written 
this piece, but they don’t want to perform it, they can’t. He said: You know, this is my last 
year, maybe I can find a possibility. He spoke with the Queen about it, and the Queen 
said: yes, of course, I have the Grasshoppers. The Grasshoppers are a group of 
helicopter pilots who amaze people all over Europe, in Canada, etc. with their helicopter 
ballet in the air. They are excellently trained and can dance Vienna waltzes with four
helicopters. (Sings) Jan said to the Queen: Please be so kind and give us the Grasshoppers, because we have no money. She did that, the pilots were consulted, the Arditti Quartet was notified and in time they found out how to mount the outboard microphones without them being damaged. A lot of microphones got broken by the rotor blades. Paff – broken! Finally we figured it out: one had to... there were three steps at the door, and a technician found out that this was the place to mount them because that was where there was the least wind. That is where we mounted the microphone, and it worked. The musicians refused to play, except for the cellist, Rohan de Saram, who is crazy. But the other three were too fine for that. Not with our instruments, they said, they are too valuable. They didn't want to use them. So we went to a store and rented cheap department store instruments and they played them. Contact microphones had to be mounted on the bridges.

P.: Does this piece have a special spiritual meaning?
S.: Yes, of course; it is the last scene of SONNTAG aus LICHT. As you know, I composed WELTPARLAMENT many years ago, a piece from MITTWOCH aus LICHT. In the large opening scene the world parliament meets with a president of the world and they discuss the problems of humanity on all levels, singing of course. Here, the ideas are very similar: to unify whatever is opposite, whatever is different, create a world that is a whole, in order to discover the beauty of this connection of all the different parameters, as we call them in music, all the different modes of appearance of life.

P.: It is strange when one works with dancers on that. I would call it a search for paradise, as if one wanted to build paradise on the stage, a utopia. In the end, I am not so far away from what you are saying.... to make different things harmonise...
S.: Do they agree with that?
P.: Oh yes, absolutely. They are very satisfied and very emancipated.
S.: That is fantastic, that is a great step forward, because young people are generally so fixated on profane things and everything there is to discover on this Earth, that they lose the idea of a paradise. – I am convinced that this life is the preparation for a much more spiritual, much more highly developed life. And paradise is a situation, a place, where one can see and perceive in other ways the complete beauty and diversity of creation for the first time. We know almost nothing about the cosmos, but in paradise we see the whole. That means, there is no end, there can be no end. The spirit develops itself on and on, it develops into a more comprehensive consciousness, to more comprehensive
recognition of the relationships between everything that exists. Everything is connected to everything else.

P.: Exactly!

S.: I want to go to paradise. Definitely. But it is taking so long....

Transcription: Heidi Fritz
Translation: Jayne Obst