3. "The Invisible Mass": compositional technique in Alfred Schnittke's Second Symphony

3.1 Introduction and Background

The present study aims to provide an in-depth look at Alfred Schnittke's Second Symphony (1979), focusing on elements of symmetry and geometric design, and putting detailed analysis in the context of the composer's own perspective on his work. The aim of the analysis is to elucidate aspects of the music that show evidence of deliberate design, and thus to glean an insight into Schnittke's compositional technique. Since the focus of the article is on the elucidation of compositional technique, the scope of the analysis is limited to objective technical details of the music, and avoids addressing potentially subjective categories such as musical meaning and cultural codes. On the other hand, the article attempts to support the relevance of the technical analysis with Schnittke's own thoughts about his approach to composing gleaned from several previously untranslated sources - the collection "Беседы с Альфредом Шнитке" ["Conversations with Alfred Schnittke"], compiled and edited by Alexander Ivashkin, and a number of previously untranslated Russian interviews with the composer, presented here with original translations by the author. The perspectives provided in each of these sources conflate on a number of issues, supporting their value as an insight into Schnittke's thinking. The collection of Ivashkin conversations is an especially valuable and rich source of information on a variety of issues surrounding the composer's work, and are advocated by the composer himself, as he writes in the brief preface to the book:

В течение многих лет я регулярно веду беседы с Александром Ивашкиным на темы как музыкальные, так и биографические. Эти разговоры записаны так, как они и происходили - без равномерной дозировки вопросов и ответов, без заботы об исцчерпанности темы или ее актуальности. Это были именно разговоры, а не последовательное выполнение автобиографической программы. Несмотря на всю неполноты этих бесед, именно в них многое было сказано в первый раз и дало мне также пищу для дальнейших размышлений - не говоря уже об очень полезных для меня спорах, где каждый осталя при своем, но четче осознал все, что обсуждалось. [For many years I have had regular conversations with Alexander Ivashkin about musical as well as biographical topics. These conversations have been recorded just as they occurred - without regard to the proportions of questions and answers, and without regard to how much a given topic has been exhausted or even to its relevance. These were conversations, and not a carefully planned biographical document. Despite the incompleteness of many of these conversations, they contained many ideas that were brought up for the first time and provided food for further deliberation, and the same goes for the many arguments, in which each one of us held on to their opinions, while both came to see the topic under discussion more clearly.] 1

A secondary source of insight are previously untranslated articles published in academically oriented journals, such as two interviews by the musicologist Genadiy Tsipin for the journals "Музыкальная Академия" ["Muzykal'naya Akademiya"] and "Музыкальная Жизнь" ["Миzykal'naya Zhizn'"] and an interview by Elena Petrushenskaya for the journal "Искусство Кино" ["Iskusstvo Kino"]. A tertiary source of insight are several previously untranslated interviews published in belletristic and popularly-oriented magazines, such as "Огонёк" ["Ogonyok"].

The genesis of the symphony can be traced to two sources - a commission from Gennadi Rozhdestvensky for the BBC Symphony, and a spark of inspiration that came from the composer's visit to the St. Florian monastery in Austria to pay homage to Anton Bruckner, who is buried there. Schnittke recounts the incident as follows:

We arrived in St. Florian at dusk, and public access to Bruckner's grave was already closed... The cold, murky baroque cathedral was filled with a mystical

¹ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994)

atmosphere. Somewhere behind a wall, a small choir sang the evening Mass - 'Missa Invisibile,' 'The Invisible Mass.' There was no one except us inside. Upon entering the cathedral, all of us dispersed in different directions, such that we would not get in each other's way, so that we could experience the performance in the atmosphere of a cold and powerful void.²

Reflecting Schnittke's experience during his visit, Symphony No. 2 implements the idea of an 'Invisible Mass' through a formal design in which each movement is paired with a section of the Mass Ordinary. The Mass Ordinary component of this design is embodied in the Gregorian chant sung by a chamber choir positioned on the balconies above the orchestra. This musical material is then manipulated to create dramatic orchestral music that carries its own logic of direction and energy, separate from the "stillness" of the choral material. Symphony no. 2 is one of several works by Schnittke with explicit religious connotations, the others being Symphony No. 4 (1984), the Requiem (1974), Choir Concerto (1984), and Penitential Psalms (1988); it follows a period of marked stylistic transformation that Schnittke's music underwent during the 1970's, precipitated by the death of the composer's parents, his interest in various religions, and his questioning of the split between the musical languages that he used in film and in his "serious" music.

A poignant feature of the Second Symphony is its heavy reliance on systematic geometric design. Despite the dramatic, emotional quality of the orchestral music, much of the material is derived in systematic ways. Geometric design can be thought of as a 'mapping' of the domains of time, pitch, and other musical elements onto the domain of space. Some of these mappings, especially the mapping of time onto space, become immediately apparent in the visual appearance of the score - the score for the Second

²Alexander Ivashkin, Program Notes to "Second Symphony of Alfred Schnittke," in Kompozitor Alfred Shnitke by Valentina Kholopova (Moskva: Kompozitor, 2008), 152-153.

Symphony is replete with passages that look like geometric shapes on the page even to someone who cannot read music. Other mappings are present in the score, but only become fully manifest in the performance of the piece. This is the case with the relationship between the orchestra and the chorus - the orchestra is situated on the stage, while the chorus is placed on the balconies above the orchestra, creating a spatial relationship between the two. This relationship is the direct translation of Schnittke's inspiration for the piece - the idea of an 'invisible' choir singing an 'invisible mass,' as the composer witnessed when visiting the St. Florian monastery in Austria. The spatial relationship between the different instrumental groups as they enter, while visible in the score, becomes fully manifest only during performance in the 'activation' of the different sections of the orchestra. Yet other mappings, such as the symmetries in the harmonic design manifest themselves only through analysis. "All the harmony in this symphony is constructed according to the principle of a cross, as too is the form. How, though, can one build up a chord according to the principle of a cross? In this case it results in two chords intermingling; they are not symmetrical, but their intermingling produces a symmetry against which a horizontal motion reacts, so that visually, on the page of the score, a cross appears." The presence of this application of geometric design is evident in the score and manifests aurally to the listener in the clarity of the music's architectonics. In terms of the harmony, the piece is replete with systematically constructed sonorities that often exhibit elements of symmetry. In terms of the form, the distribution and metrics of its sections are laid out in clear geometric patterns both on the macro and micro levels. In terms of the orchestrational devices employed, the work is replete with canons, "Schattenklänge," or "shadow-sounds," systematic alterations of

³ Alfred Schnittke. Program notes. 2. Symphonie. Vienna: Universal Edition, 1979

instrument groups, systematically constructed heterophony, and other devices that suggest a geometric underpinning.

This reliance on a systematic application of geometry is notable in the light of Schnittke's keen awareness of his own compositional methods, and the different roles that systematic and "irrational" approaches to composing play in his work. In an interview with Genady Tsipin, Schnittke states:

Я всегда понимал сочинение музыки как взаимодействие сознательной работы и интуитивных процессов. С одной стороны - тщательное обдумывание всего, что делаешь, с другой - подсознательное ощущение, интуитивная догадка. При игнорировании того или иного, при чрезмерной опоре на что-то одно результаты работы неизбежно ухудшатся. Истина, помоему, в гармоничном сочетании обоих этих слоев, в их взаимодействии, синтезе, взаимопроникновении. [I always understood music to be a product of the interaction of conscious work and intuitive processes. On the one hand - a careful deliberation of everything you are doing, and on the other - a subconscious feeling, an intuitive insight. When one or the other is ignored because of an excessive reliance on the other, the work inevitably suffers. The right path, I think, lies in a harmonious combination of both of these components, in their interaction, synthesis, and mutual influence]⁴

In the same interview, Schnittke compares his compositional process to a scribal, rather than creative task, claiming his technique to be based on hearing music that already exists:

"Чем дальше, тем больше я ощущаю: задача моя не в том, чтобы музыку придумать. Задача - не помешать своему уху услышать существующее вне меня. Интонируемый композитором мир как бы существует вне его, цомпозитор же может только с той или иной достоверностью к этому миру подключиться. И моя задача состоит в том, чтобы не помешать самому себе ложными идеями - от головы - "не сбить" то, что я слышу." [The further I go, the more I feel it: my goal is not to create music. My goal is to keep myself from getting in the way of my own ear hearing that which exists outside of me. The world intoned by the composer exists outside himself, while the composer can only connect with it with some degree of authenticity. My goal is to not allow ideas that originate in my head to interfere with what I'm hearing."

⁴ Genady Tsipin. "Real'nost' kotoruyu zhdal vsyu zhizn'." Muzykal'naya Akademiya, 1988.10 (1988), 25

⁵ Genady Tsipin. "Real'nost' kotoruyu zhdal vsyu zhizn'." Muzykal'naya Akademiya, 1988.10 (1988), 18

In a different interview, Schnittke recounts the composition of parts of his Requiem as if it was composed in a dream:

Помню, в 1975 году мною был написан "Реквием"; так вот, я не преувеличу, если скажу, что мне будто бы подарили его - так легко, само собой появилось на свет это произведение. Есть в "Реквиеме" одна часть, которую, мне кажется, я просто сочинил во сне. То есть я проснулся утром с этой музыкой. Словно бы мне ее кто-то продиктовал во сне. Я вообще сказал бы, что есть в творческой работе две крайности - два полюса, если хотите. Те самые, что называют обычно интуицией и разиональным расчетом. Не знаю, как другие, не берусь судить, но я лично постоянно балансирую между этими крайностями - как между Сциллой и Харибдой. Но что интересно: при всей кажущейся противополоюности "рационально продуманного" и "интуитивного," они где-то смыкаются. Будто Сцилла и Харибда протягивают время от времени руки друг другу. [I remember in 1975] I had composed the Requiem. I would not be exaggerating if I said that it was as if this piece was given to me as a gift - that's how easily this composition came to fruition. There is one part in the *Requiem* which I think I composed in a dream. When I woke up in the morning, the music was there already. I would also say that the creative process has two polar extremes - the ones that are usually called intuition and rational calculation. I don't know about other artists, I won't speculate about them, but personally I always find myself balancing between the two - as if I'm balancing between Scylla and Charybdis. But what is interesting, is that despite all the seeming contradiction between the "rational" and the "intuitive," somewhere these two categories intersect, as if Scylla and Charybdis stretch out their hands and reach out to one another.]6

Schnittke further elaborates on this in a conversation with Ivashkin: "Да, есть два типа сочинения, я нахожусь то в одном, то в другом. Последние годы я стал меньше опираться в работе на рассчитаное и точно сделанное, и больше - на как бы непроизвольное, вроде бы расчетам не поддающееся." ["There are two ways of composing, and I find myself doing one and the other. In recent years I find myself relying less and less on the calculated, the precisely measured, and more on the irrational."]7 "Having rejected serialism, I did not 6 Genady Tsipin. "Al'fred Shnitke: o muzyke, rabote, i o sebe." Muzykal'naya Zhizn', 1990.8 (1990). 3

⁷ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 56.

reject the idea of structural organization, I just want to subject it to perception. All of the calculated technique, everything 'hidden' in the music - monograms, symbols, proportions, hints and allusions - must still be perceived by the listener. A composition devoid of this 'submerged' component cannot create a lasting impression. Therefore I always vacillate between two modes of composing.

Structurally ordered compositions - the *Fourth Symphony*, the *Third Concerto Grosso* - alternate with ones where structuring principles are virtually absent - the *Fourth Violin Concerto*, the *Viola Concerto*, the *Second Concerto Grosso*."

The distinction between systematic structural organization and intuition, and especially the idea of subjecting organizational principles in service of the perceived result, are strongly expressed in the *Second Symphony*. Despite the strict systematic organization of its material, the perceived development of the music seems to follow a natural path, and the organizational principles in the music, while being present on the surface, do not detract from the perceived result. Due in part to the complementary nature of the systematic design in each realm of the piece's construction, harmonic, timbral, and formal organization reinforce one another towards a single sounding result. Schnittke relies on simple and clear systems and geometric patterns as the principal organizing factors, employing simple systematic design on multiple levels and scale factors.

3.2 Analysis of Compositional Techniques

3.2.1 Overview of Form

Schnittke seems to have been keenly aware about the role of form in his compositional process, and spoke about its role in his work several times. In one

⁸ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 70.

conversation with Ivashkin, he elucidates the difference, in terms of formal design, between composing according to a pre-planned blueprint, and according to a moment-to-moment intuition:

Раньше я сочинял, исходя из сверху видимой формы, постепенно заполняемой деталями, а сейчас я больше сочиняю, исходя из ежесекундно живого момента, который может менятся. Для меня появилось сейчас то, чего я больше всего всегда хотел, но чего у меня не было: появилась бесконечность каждой секунды. Появилась бесконечность нити. Я заню, что сочинение формально заканчивается, но в действительности оно никогда не заканчивается. Нет последней точки. [Previously I composed by conceiving of an aerial view of the whole form, and gradually filling it with details. Now I compose according to a moment living second-by-second, which can change. I got a sense of that which I always wanted the most: the infinity of every second. I got a sense of the infinity of the musical thread. I know that in practice a composition has an ending, but in reality it is never-ending.]9

The Second Symphony strongly demonstrates an "aerial view" to the construction of the form. The simple layout and clear articulation of the subdivisions of the music at different levels suggests a "top-down" approach, in which the piece is gradually filled in with details at the different scale levels, starting with the largest formal sections, and gradually working down to details of the musical material. Schnittke seems to eschew the idea of blending material to obscure the divisions between the different sections within the form in favor of using clear formal articulators. The section-to-section transitions in this piece rely on favorable juxtapositions of musical material on the two sides of a given sectional division rather than on obfuscating the seam at this division. Furthermore, while each movement takes a slightly different approach to form, there are several formal tropes that are used throughout the piece: a "responsorial" alteration of blocks of music, in which material is echoed from one section to another; the use of orchestration as an articulative element; a disposition to derive musical details from pre-

⁹ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 180

existing material, such as a given Gregorian chant, the harmonic series, or the chromatic twelve-note aggregate; the reuse of fixed harmonic structures in several movements as structuring devices. In addition, Schnittke frequently makes use of the gradual accumulation of layers of material as a means of increasing tension, the use of breaths and pauses as articulatory devices, the use of drones and pedal points as unifying devices; the use of simple numerical relationships as a means of rhythmic organization and of numbers as symbols, a deliberate variation and long-range shaping of orchestrational density and transparency, and a careful dosing of the proportions of the use of the choir and the orchestra. In every movement, the form is clearly articulated and transparent to the attentive listener without sacrificing a sense of unity and direction.

3.2.1.1 Form in the first movement, "Kyrie"

The form of the first movement embodies the clear geometric simplicity that characterizes the piece. The structural components on every level of detail can be understood in simple arrangements of ever-smaller components, revealing evidence of systematic design on every scale. The largest-scale view reveals two major sections - the introduction (reh. 1 - 5) and the main portion (reh. 6 - 19). These can be further subdivided into simple arrangements of subsections. The introduction consists of the "Kyrie" chant in the chorus, accompanied by keyboards, plucked string, and pitched percussion instruments softly arpeggiating one of the piece's main harmonic ideas, while the strings expose this harmonic idea with a gradually accumulated multi-layered aggregate. The sectional subdivisions of the arpeggiations are clearly grouped together with their orchestration and tessitura, while the musical material itself is derived systematically, as will be discussed below in my harmonic analysis (3.2.1). The

main part of the movement consists of alterations of blocks of two types of material - transformations of the "Kyrie" chant and block-chords repeated in pulsing patterns. The inner structure of each of these blocks is likewise organized with a clear "aerial view" of the form, and seems to be based on the use of the number 3. The "Kyrie" imitations portion consists of three clearly articulated components (two in the last iteration at reh. 18), each of which contains 3 distinct phrases. Each of the corresponding responsorial sections containing the "polyrhythmic pulses" likewise consists of three phrases. Furthermore, the rhythmic layout of these "pulse" sections is subjected to a rigorous geometric design of 6 repetitions, followed by 5 repetitions followed by 17 repetitions. This design is symbolic, mirroring the syllable count of the phrases 'Kyrie eleison' (6 syllables), 'Christe eleison' (5 syllables), and the combined 'Kyrie eleison, Christe eleison, Kyrie eleison' (17 syllables). Overall, the layout of the form in this movement adheres to a simple and clearly articulated design pattern, as shown in figure 17 in the appendix.

3.2.1.2 Form in the second movement, "Gloria"

The second movement consists of two main components - the introduction (reh. 1 - 4), in which the main "Gloria" chant melody is stated in the choir and then imitated as canons in the orchestra, and the second section (reh. 5 - 23), which consists of a gradual buildup of a "harmony cloud" through the canonic accumulation of a densely layered heterophonic webwork of melodic strands that outline a single harmony. The melodic material in the introduction is organized into clear segments articulated by changes in orchestration as well as rhythmically with pauses in the texture, and each block of imitation consists of three clear phrases. The "harmony cloud" is the first

instance of a texture that is used several times throughout the piece. In this texture, instruments in the orchestra enter one-by-one, beginning with the contrabasses, gradually creating a heterophonic multi-layered texture in which each layer plays melodic lines that outline a single implied harmony. The entrances of the instruments are distributed to correspond to a pattern of increasing instrumental weight, creating the effect of a continuous crescendo, while the lines played by these instruments contain an ever-increasing amount of rhythmic activity and angular movement, so that an effect of continuously increasing tension is created despite the unchanging harmonic underpinning. An additional factor in the sonic effect of this section is the organ pedal point held throughout, which creates a unifying "bed" on top of which other instruments are accumulated. While on the page the layout of this section seems complex, with many layers of material seeming to create a dense counterpoint, its systematic structural layout and formal function are simple and clear. Like the first movement, the form of the second movement is constructed systematically using a simple geometric layout. The powerful effect of the music lies in the precise choice and juxtaposition of material, not in elaborate design of the form which the material is to fill. The form of the second movement is illustrated in figure 18 in the appendix.

3.2.1.3 Form in the third movement, "Credo"

The third movement, "Credo," is organized according to a "responsorial" distribution of blocks of material. The overall form of the movement is organized in several episodes, separated by an orchestral "swelling" effect, in which the orchestral performs a gradual crescendo and diminuendo on a single sustained note or chord. The "episodes" in this movement are likewise constructed in a "responsorial" manner, with soloists in the choir responding to phrases in the orchestra. An example of this is shown in figure 2.



Figure 2: A "responsorial" phrase in the third movement, "Credo" (score page 37)

A notable feature of this movement is that all of the orchestral material is derived systematically from the Gregorian chant on which it is based, and the various harmonic permutations the material undergoes will be discussed in detail in the chapter on harmony. The form of the third movement is illustrated in figure 19 in the appendix.

3.2.1.4 Form in the fourth movement, "Crucifixus"

A simple geometric design is implemented as the formal blueprint for the fourth movement. In this section, the music is constructed in three layers, each of which implements a canon repeated every six measures. The first section implements a gradual accumulation of melodic fragments through canonic repetition in three distinct

layers. The accumulation is carried out in such a way that at the climax of this section, each instrument in the orchestra is playing its own independent material. The pitch collections employed in this section are derived from twelve-tone aggregates and will be discussed in detail in Chapter 3.

The first section of the fourth movement, "Crucifixus," implements a gradual build-up consisting of the accumulation of 36 layers of material through the canonic reiteration of 3 melodic lines in 3 distinct layers. The canons in each of the three layers are organized by the entrances of new instruments and instrumental groups at each rehearsal mark, beginning with first violins, vibraphone I, and contrabass I, and progressing through rehearsal 12. The organization of instrumental entrances is shown in figure 3. The form of the fourth movement is illustrated in figure 20 in the appendix.

Reh. Num.	Layer 1, "Melody"	Layer 2, "Half-note Pulse"	Layer 3, "Walking Bass"
1	Violins I	Vib. 1	C.Bass 1
2	Violins II	Vib. 2	C.Bass 2
3	Clarinet 1	Vib. 1, 2nd voice	C. Bass 3
4	Alto Flute	Vib. 2, 2nd voice	C. Bass 4
5	English Hn.	Celesta	C. Bass 5
6	Bass Cl.	Celesta, 2nd voice	C. Bass 6
7	Bassoon 1	Celesta, 3rd voice	C. Bass 7
8	Violas	Celesta, 4th voice	C. Bass 8
9	Cellos	T. Bells	Bass Guit
10	Bassoon 2	T. Bells, 2nd voice	Piano
11	Horn 1	Glock.	Piano, 2nd voice
12	Horn 2	Glock., 2nd voice	Piano, 3rd voice

Figure 3: Order of instrument entrances in the fourth movement, "Crucifixus"

3.2.1.5 Form in the fifth movement, "Sanctus"

The fifth movement, "Sanctus," while maintaining the architectonic clarity of the first four movements, also implements a new sense of through-line, and even hints at sonata form, with a clear exposition and recapitulation, and something akin to a development. On the largest scale, the movement consists

of two major components, both of which are explicitly labeled in the score - an extensive choral introduction, sung to the text "Sanctus Dominus Deus Sabaoth. Pleni sunt coeli et terra gloria tua. Hosanna in excelsis. Benedictus qui venit in nomine Domini," and a section of orchestral music. Both of these sections implement their own complete forms and can be held as distinct sections on their own.

The choral introduction is cast in five distinct units of material, each of which are split into two sub-sections. In the first three of these units ("Sanctus Dominus Deus Sabaoth," "Pleni sunt coeli et terra gloria tua," "Hosanna in excelsis") the first sub-section presents melodic material as a duet between two voices, while the second sub-section repeats the duet verbatim, but as parallel organum in perfect fifths, and employing four voices instead of two. In the final two units ("Hosanna in excelsis," "Benedictus qui venit in nomine Domini") the process is reversed - first a parallel organum version of melodic material is presented, then the material is repeated as a duet between two solo voices. This formal design casts the choral introduction into a satisfying shape - in the first three units the placement of a parallel organum version of the material as the second subsection in contrast to its solo presentation in the first sub-section, creates a sense of growth and forward momentum, while the reversal of this process in the final two units creates the opposite effect of release and closure.

The orchestral portion of the fifth movement, "Sanctus," is cast in a form which, while being clearly articulated by sectional subdivisions like the previous four movements, implements a new type of through-line in the way the movement's subsections are connected, and even hints at sonata form in the way melodic motives in the movement are introduced and developed. The type of connection between adjacent sub-

sections which create a through-line is guided by a principle of interruption - of forward momentum being suddenly cut short by a dramatic musical event which throws the piece into a different direction. For example, at reh. 3, the simple melodic line of the oboe d'amore is suddenly turned into a dissonant sound-mass with the introduction of the clarinets chromatically "snaking" beneath it; one bar before reh. 7, a forte dynamic combined with a sudden burst from the electric guitar and vibraphone cause the previously expanding set of motives to plummet and be eliminated; at reh. 9, the melodic material is eliminated by a sudden acceleration and chromatic accretion.

The musical material in this movement can be summarized into two distinct character types - simple "singing" melodic lines reminiscent of the melodic material in the choral introduction, accompanied by sparse counterpoint, and dense chromatic clusters of sound which interrupt the simple lines. The alternation of these two types of material creates the sense of binary opposition which characterizes the sonata principle (in more traditional implementations this binary opposition is between the keys and themes of the principal and secondary thematic groups) while the "recapitulation" of this movement at reh. 21 seems to blend these two characters in a synthesis, just like the sonata principle prescribes. Thus, the sonata-like sections of this movement can be seen as follows: exposition principal theme at reh. 1; exposition secondary theme at reh. 5; exposition closing theme at reh. 8; development at reh. 11; development "crisis" at reh. 18; recapitulation at reh. 21. The form of the fifth movement is illustrated in figure 21 in the appendix.

3.2.1.6 Form in the sixth movement, "Agnus Dei"

The form of the sixth movement, "Agnus Dei," can be described as a rounded binary form with a choral introduction and coda. In terms of the direction of the music, the

material in this movement seems to gradually ascend through the A section, to suddenly intensify and reach a climax in the B section, and to collapse into a "magical" stasis, underpinned by the use of resonant keyboards and mallet instruments at the return of the A section, as shown in figure 8

The A sections of this movement are driven by the recurring use of a single melodic motive, shown in figure 4.



Figure 4: Main motive of the sixth movement, "Agnus Dei"

This motive is derived from one of the most important harmonic ideas of Symphony No. 2, the idea of an overtone series based on C, first presented in the first movement, "Kyrie," and used as an anchor throughout the piece (this idea is discussed in detail in chapter 3.2.1, "Geometry in the Harmonic Design"). The ascending, "floating" profile of this melodic motive is used as a central idea of the movement - besides the specific version of the ascent as manifested in the motive, the general ideas of ascent and descent seem to be important, and carried out in large-scale stretches. Material generated by groups of these motives forms units that seem to be guided by the same principle - the music ascends and accumulates sonic weight until the apex of this accumulation forces the process to be restarted at an ever-higher energy level. Thus, the motive ascends, groups of material formed by these motives ascend, and the large-scale formal groups ascend. Overall, the sixth movement blends the architectonic clarity seen in the previous movements with a fluid and blended approach to melodic construction and a reliance on the motive as a central structuring unit.

The form of the sixth movement is illustrated in figure 22 in the appendix.

3.3 Harmonic Design

The harmonic design of the Second Symphony adheres closely to the systematic application of symmetry and geometry. In each movement, the harmony adheres to an organizational principle, functioning both on the local level of vertical sonority and on the level of the entire work. Each movement presents a somewhat distinct approach to this problem, while the piece also carries an overall trajectory - harmonic ideas first presented as mere manifestations of systematic structuring principles, such as the idea of structuring harmonies based on vertical reflexive symmetry, or the idea of a harmonic series, gain motivic and narrative weight as they become reused throughout the piece, culminating in the sixth movement, where the idea of the harmonic series crystalizes into a concrete repeated melodic motive.

In the first movement, symmetry and geometric design permeate the vertical structure of virtually every passage. In accordance with Schnittke's intention to construct the harmony "according to the principle of the cross," 10 the intervallic layout of each harmonic construct is structured using reflexive symmetry anchored on a central axis. The use of whole-tone and chromatic pitch collections in some sections also aligns with the symmetric design of the harmony.

The first of these symmetric structures appears in rehearsals 1 - 4, where the strings gradually build up the following sonority, as shown in figure 5.

¹⁰Alfred Schnittke. Program notes. 2. Symphonie. Vienna: Universal Edition, 1979.

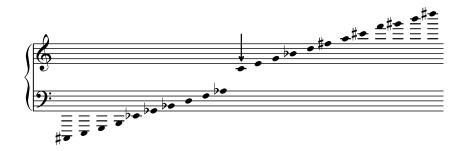


Figure 5: Harmony unfolded in reh. 1 - 4 of mov. 1. The arrow indicates the pivot-point for the harmony's reflexive symmetry. All pitches sound together, horizontal spacing is added in the figure for visual clarity. (score pp. 2-4)

As the figure shows, the sonority is anchored on the central pitch C4, and two portions of the harmony above and below this pitch exhibit reflexive symmetry. For example, the major third C4-E4 is reflected by the major third Ab3-C4, the minor third E4-G4 is reflected by the minor third F3-Ab3, and so on. The perfect reflexivity of this harmony is broken only by the highest pitch in the structure - the D#7, which is not reflected in the lower half of the sonority. This pitch, as well as its role as an 'outlier,' will become important for the piece's macro-structural harmonic connections, and its role will be discussed in greater detail further on.

Besides its reflexive symmetric structure, the sonority can also be viewed from several other perspectives. First of all, the harmony is triadic - every interval in the harmony is, directly or enharmonically, a major or minor third. The triad is an important structure for Schnittke, and something he relates to naturalness. Furthermore, the upper 'half' of the harmony, including the C4 axis, suggests a harmonic series based on C. Though the higher notes of the chord don't exactly correlate to the harmonic series based on these partials, Schnittke believed that "when placed against a strongly present triadic harmony, any dissonant notes will

seem to be overtones."¹¹ This overtone-like structure is also a twelve-tone collection, and a pattern that becomes one of the themes of the work. The sixth movement of the work, "Agnus Dei," casts a modified version of this pattern in a motivic role, indicative of the composer's desire to unite sections. This upper portion of the harmony can also be subdivided into four triads, [C E G], [Bb, D, F#], [A, C#, E#], [G#, B, D#]. It can be seen that this structure is in itself symmetric - the uppermost minor triad [G# B D#] is a reflection of the lower major triad [C E G], while the two augmented triads in the inner portion of the sonority are reflections of each other.

The rule holds true for the entire sonority with one exception - the highest pitch of the upper half of the sonority, D#7, is not reflected in the lower half. If the reflexive symmetry were to hold true for this note as well, one would expect the lowest note of the harmony to be A0, a major third below the given lowest note, C#1. This seeming omission from the perfect geometry of this structure is intentional. While a perfectly symmetrical structure would have no harmonic pull, the inclusion of this 'wrong note' gives the structure a sense of instability, and thus of harmonic direction. When it is used in the identical harmonic structure in second movement, the D# relates enharmonically to the Eb which is the central pitch of the third movement. The Eb then also becomes the central note in the main twelve-tone row used in the fourth movement.

The polyrhythmic block-chord passages in the Kyrie (reh. 5, reh. 9, and reh. 13) follow a similar design. While none of the individual chords in each of the keyboard instruments are symmetric by themselves, their combination forms a

¹¹ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 72.

symmetric vertical sonority similar to the one outlined by the strings in reh. 1 - 4 (fig. 6).

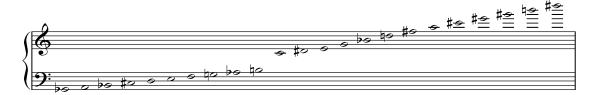


Figure 6: Resultant pitch collection at reh. 5 of mov. 1
The combination of harmonies in percussion and keyboard instruments at reh. 5 (score p. 4)

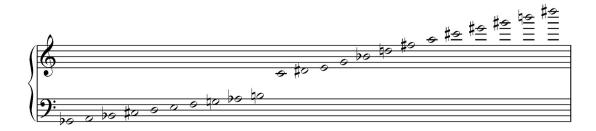


Figure 7: Resultant pitch collection unfolded by strings in reh. 1 (score p. 2)

As can be seen in the two figures above, the resultant collection from the string "shadow-sound" harmony unfolded in reh. 1 - 4 fits into the the new resultant pitch collection at reh. 4, but this new collection inserts additional pitches: A2, C#3, E3, G3, B3, D#4. To make this relationship more clear, the combined harmony is shown in figure 10, with the "new" notes that are present in the keyboard harmony, but not in the string harmony shown in black.



Figure 8: Combined harmony from strings in reh. 1 - 4 and percussion at reh. 5 (score pp. 2–4)

The harmonic structure appearing in the first movement resurfaces again in the second movement, "Gloria." Here, after a brief choral introduction ("Gloria in excelsis Deo et in terra pax hominibus bonae voluntatis. Laudamus te. Benedicimus te. Adoramus te. Glorificamus te") and an episode based on closely-spaced chords in the Lydian-Mixolydian mode, the music creates a 'harmonic field' by unraveling the before-mentioned harmony as an arpeggio in various rhythmic permutations. In this case, since only the upper portion of the symmetric sonority under consideration is used, and because the organ continuously sounds the low C pitch, which acts as the bass of this harmony. Taken out of the context in which it first appeared in the first movement, the sonority has a natural quality, sounding like a harmony based on the harmonic series, though the upper notes of this sonority don't conform to the harmonic series exactly. The similarity of this harmony to the harmonic series is notable, since 'naturalness' is a concept Schnittke acknowledged as something that appears in his music. In one of Schnittke's conversations with Ivashkin, Ivashkin queried Schnittke whether the C-major triad that frequently appears in his music is a product of nature or of culture. Schnittke replies:

"For me this is a product of nature, and the triad doesn't have to be C-major. I also believe in the natural basis of the harmonic series because I have experienced it for myself - several times I've heard it the morning by the sea, and I've also heard it once in the town of Ruza, coming from the side somewhere. I couldn't explain it. Maybe a milking machine was being started up somewhere, and its mechanism produced a harmonic series, it could have been a complete coincidence, but for me the effect was as if it was something emanating from another realm." 12

However over-poeticized the composer's own account may be, the appearance of the sonority in the "Credo," especially with the C-major triad as its basis, and its tones shadowing the harmonic series, signals that it has to do with symbolism of nature. The aleatoric arrangement of the parts' entrances and their aleatoric rhythmic arrangement also hint at something natural - a process not neatly prescribed by the composer, but happening somewhat chaotically and unpredictably. Naturalness-as-order and naturalness-as-chaos exist side by side in this passage.

The harmony of the third movement is also derived from systems built on symmetry, with the harmonic layout of sections of the movement based on the "overtone chord" already discussed in relation to the first and second movements. For example, one of the orchestral 'swell' effects used at reh. 15 sees the harmony expand to a complex symmetric sonority shown in figure 9.

¹² Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 138.

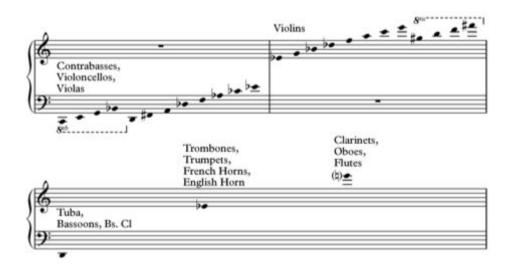


Figure 9: Harmony at the climax of 'swell' 3 (reh. 15) in movement 3 (score p. 42)

This sonority has interesting implications for inter-movement connections and harmonic function. The portion of the sonority given to the strings (shown on the first system of fig. 7) is related to the sonority that ends the previous movement, the "Gloria." The portion of the harmony given to the violins is the inversion of this row. The Eb drone is brought into focus in this harmony by being placed at its center, with upper and lower parts of the harmony spread symmetrically around it. The portion of the sonority given to the brass and winds further emphasizes this pitch, adding a sense of instability and gravity towards the center note - the center of this three-note portion of the sonority is also Eb, but its outer notes, also placed symmetrically two octaves and a half step above and below the Eb, are both a step above and below the total gamut, or a step closer inward towards the Eb center. Thus this harmony both relates to the ending of the previous movement, and contains a pull towards its center pitch.

The orchestral swell at rehearsal 24 also contains a symmetric twelve-tone sonority centered around the Eb, as shown in fig. 10.



Figure 10: Harmony at the climax of swell 4 (reh. 24) in movement (score p. 44)

In this sonority the symmetry exists on two levels - the upper and lower portions of the harmony centered around the Eb are twelve-tone collections, and are inversions of each other. Likewise, each of these two twelve-note subsonorities are composed of two hexachords that are inversions of each other. The outer pitches of this collection correspond to the previously discussed wind and brass portion of the sonority in 'swell' 3, where the brass and winds are a step 'inward' from the main gamut, and thus a connection between the two can be made. It could be said that the placement of winds and brass in swell 3 anticipates the harmony in swell 4. Additionally, at the climax of swell 4 the organ performs a chromatic cluster stretching the entire range of the underlying symmetric harmony.

The harmonization of the chorale-like material in the main sections of the "Credo" likewise relies on symmetry. In the first half of section 1 the simplest version of the pitch system is exposed. In this section, the basic pitch material for the main melodic lines is confined to the five-note gamut [D, E, F, G, A], which is carried by the top line of the contrabasses and by the contratenor. The set of basic melodic shapes that these voices make is shown in fig. 11.



Figure 11: Melodic shapes in section 1 of the third movement

The harmonization of each of the notes in this gamut is fixed - the same notes are always associated with the same underlying harmony. As shown in figure 12, this harmony can be derived systematically. The five-note gamut mentioned is combined with a 4-note chromatic sequence (the D is repeated twice), and with inversions of these two collections, symmetric across the mid-point of C and C#. In figure 12, the top line represents the melodic gamut, the second line represents the ascending chromatic sequence it is paired with, the third line is the inversion of this chromatic sequence across the axis between C and C#, and the bottom line is the inversion of the top line across the same axis.



Figure 12: Harmonization in sections 1 and 2, played by contrabasses divisi (score p. 37)

This basic material is further developed through transposition. In the second half of section 1, the canonic imitation is transposed down a tritone; in the first half of section 2, it is transposed up a tritone; in section 3 it is transposed up a minor 3rd.

In the second half of section 2, additional parameters are added to the harmonization. In this passage, the first and second violins are imitated canonically by the violas, cellos, and contrabasses. The harmonization for each note in the passage is much thicker than the one just discussed, consisting of twelve different lines, as opposed

to only four. However, the organization of these lines in terms of pitch also relies on symmetry. The twelve different lines that constitute the top (violin) layer of this section can be subdivided into three harmonic layers whose pitch material is based on a combination of the basic system discussed above, and a second very similar system. As shown in fig. 15, the bottom layer of this multi-part harmonic design conforms to the original system from section 1, the top layer to its tritone transposition, and the middle layer to another very similar system of fixed harmonization.



Figure 13: Harmonic systems at reh. 12 in the third movement, "Credo" (score p. 41)

The somewhat new pitch material in the middle layer is built in a very similar fashion to the original system discussed - for every pitch in the top line, the three corresponding parts are fixed, and the bottom two parts are inversions of the top two parts across the A-Bb axis. The notes given to the canonic imitation of this material in the violas, cellos, and basses, are based on the same system transposed by a tritone and two octaves.

The twelve-tone system seems to play a central role in the fourth movement,
"Crucifixus," both as a structuring element and as the poetic focus. While other
movements employ harmonic structures that saturate the twelve-tone aggregate, the use

of the twelve-tone system in the other movements remains beneath the perceptual surface of the music, while in the fourth movement, it takes precedence. In this movement, virtually every aspect of the harmony, melody, form, and orchestration are driven by twelve-tone rows. The main section is divided into twelve rehearsal marks, each of which contains six bars, with every line in every instrument within these six bars containing a twelve-tone row; the combination of the first notes and the combination of last notes of each six-bar segment forms an ascending chromatic (twelve-tone) scale. Figure 14 illustrates the presence of twelve-tone aggregates on different levels in this movement.

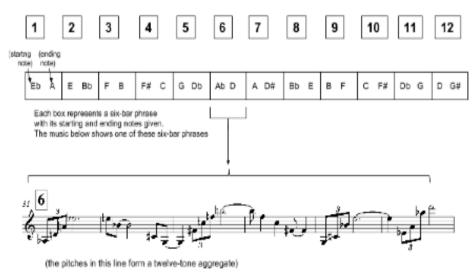


Figure 14: The succession of twelve-tone aggregates in the fourth movement with an example of one of these aggregates

The texture of the movement can be divided into three main components: the "melody layer," which consists of a single melodic line (see figure 23) spanning the twelve rehearsal marks, imitated canonically at each rehearsal mark by a different instrument or instrumental group, the "pulse layer," in which the pitched percussion instruments provide a constant half-note pulse, and the "walking bass" layer in the

double basses and piano, punctuated by harp, bass guitar, and timpani. A simplified score for rehearsal mark 1 with the 3 layers is shown in figure 15.



Figure 15: Texture in the opening of the fourth movement (score p. 51)

It is interesting to note that, although the twelve-tone serial techniques are foregrounded in this movement, the rhythmic profile of the music is unlike the type of rhythmic profile expected in twelve-tone music. Instead of attempting to eliminate a sense of pulse and periodicity, which is the stereotypical rhythmic hallmark of serial composers, Schnittke provides a clear sense of pulse with the vibraphone and the "walking" double bass. The rhythmic profile of this movement, juxtaposed with the pitch system used, conjures the following thought from the composer:

Догматичное избегание периодичности в серийной музыке мне кажется самым большим злом. Я вообще убежден, что наибольшие просчеты и ложные догмы сериализма - даже не в звуковысотной стороне, а в ритмике. И, кстати, чем замечателен Штокхаузен, что он это одним из первых понял и вернулся к хотя и усложненной, но все же периодичности. [The biggest evil in serial music is its dogmatic eschewal of periodicity. I am convinced, that the biggest miscalculations of serial music lie not in its approach to pitch, but to rhythm. By the way, this is why Stockhausen is so wonderful: he was one of the

first to understand this, and to return to periodicity, even if it was a more complex version of periodicity.]¹³

The pitch construction of the main melodic layer foregrounds the use of the twelve-tone method. The melody, shown in figure 23, consists of twelve sixbar segments, each of which forms a twelve-tone aggregate. The twelve-tone system is not adhered to in the Schoenbergian sense of the technique, which essentially aims to separate the pitch and rhythmic elements of the music (the "talea" and "color"). Notes in Schnittke's twelve-tone "rows" in each six-bar segment are frequently repeated before the segment expires. Schnittke seems more focused on the perceptual effect of the music, and the twelve-tone aggregates create a special harmonic and melodic atmosphere, rather than being used purely for structural reasons. However, without adhering to any prescribed dogma, Schnittke invents his own rigorous organizing principles for this movement. The first notes of each of the twelve six-bar segments forms another twelve-tone row - the ascending chromatic scale, [Eb, E, F, F#, G, Ab, A, Bb, B, C, Db, D]. The final notes of each six-bar segment also form an ascending chromatic scale: [A, Bb, B, C, Db, D, D#, E, F, F#, G, G#]. The result follows the trend in Schnittke's compositional technique of fusing a high degree of organization with an eschewal of dogma and reliance on his own perceptual instinct to give the music its final shape. Once again, Schnittke's own reflection on his compositional technique in one of his Ivashkin conversations comes to mind:

Отказавшись от сериализма, я не отказывался от идеи структурной упорядоченности, я просто пытаюсь подчинять ее ощущению. Вся точная

¹³Ālfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 52.

техника, все 'запрятанное' в музыку - монограммы, символы, пропорции, намеки, аллюзии - все равно воспринимается. Сочинение, лишенное такой подводной части, не может произвести устойчивого и длительного впечатления. [Having rejected serialism, I did not reject the idea of structural organization, I just want to subject it to perception. All of the calculated technique, everything 'hidden' in the music - monograms, symbols, proportions, hints and allusions - must still be perceived by the listener. A composition devoid of this 'submerged' component cannot create a lasting impression. Therefore I always vacillate between two modes of composing.]¹⁴

The "half-note pulse layer" follows similar compositional rigor in terms of its pitch structure. Each six-bar segment of this layer introduces a new twelve-tone row, while the previous segment gets layered beneath it. The whole line of pitches in this layer is shown in figure 24. In addition, each of the twelve six-bar segments contains some permutational symmetry. For example, in the segment at rehearsal mark 1, the second half of the segment is a retrograde inversion of the first half. In the segment at reh. 2, bars 3 and 4 are a transposition of the line in bars 1, and 2, while bars 5 and 6 are an inversion. At reh. 3, bars 4 and 5 are a retrograde inversion of bars 2 and 3. At reh. 4, and 5 the two halves of the segments are retrograde versions of each other.

The "walking bass" layer of the texture presents music cast in quarter notes with quarter note pauses, which, combined with the bass timbre chosen for the passage, creates the impression of a "walking bass." The pitch collections in each 6-bar segment of this layer have similar characteristics to the segments in the other two layers - each segment comprises a twelve-tone aggregate, and the sequence of starting notes, as well as the sequence of ending notes for the twelve segments spell out ascending chromatic scales. The pitch structures in this layer have the additional characteristic of each the intervallic profile of each subsequent six-bar segment foregrounding increasingly larger intervals, such that the lines in the first two segments contain major and minor seconds,

¹⁴Ālfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 70.

the lines in segments 3 and 4 introduce thirds and fourths, and so forth up to segments 11 and 12, which consist mostly of sevenths, octaves, and ninths.

The "overtone chord" resurfaces again in the ending of the coda to the fourth movement. In this passage, at rehearsal 37, the harmonic structure is first given melodic characteristics that somewhat obscure its harmonic-series basis - instead of the continuous ascent characteristic of this element in its previous iterations in the second and third movements, here the figure is given a melodic shape, rising through the tones of the major triad, stepping up the major scale to the tonic, and descending again with an added turn. However, at the end of this section, the now familiar continuously rising character of this structure returns. The low-C organ pedal tone appears here as it did in the second movement, and cements the inter-movement connections that the passage establishes.

3.3.2 Timbral and Orchestrational Design

Symmetry and geometry are also present in the timbral architectonics of the symphony. These are expressed in terms of the deployment of orchestral instruments, and in the way the the choice of instrumental timbre is combined with the choice of harmony. It's useful to think of timbre not only in terms of the choice of instruments, but also in terms of the direct relationship between harmony and timbre. Since instruments attain their timbral characteristics mainly due to the relative strengths of their partials, harmony and timbre are not entirely separate phenomena, but a matter of delineation on a continuum of combining frequencies. Certain percussion instruments, for example, are rich with non-harmonic partials, so their timbres can easily be thought of as containing chords and harmonies, bending the boundary between harmony and timbre. Changing the constituent timbres of the instruments in a harmonic combination would affect the

resultant harmony, while changing the notes in a chord affects the resultant timbre.

Timbre and harmony are really two sides of the same coin, and while each may be looked at separately from an analytic standpoint, in real world situations one cannot exist without the other.

Schnittke was aware of this phenomenon. In one conversation with Ivashkin he talks about the relationship between keyboard instruments and strings in his *Third Symphony*: "The tertian nature of the harmony is more apparent for keyboard instruments, they win out acoustically, and the strings begin to seem like overtones of these triads. When placed against a strongly present triadic harmony, any dissonant notes will seem to be overtones." ¹⁵

An additional and pivotal factor in viewing sound in this way is sonic evolution through time. In the previous two paragraphs, sound was considered as though it were a snapshot frozen in time. In reality the frequency profile of any sound is rarely static. For example, when a trumpet plays a note, the frequency profile of the note will evolve over time. As the trumpet player begins the note (the "attack"), frequencies in the upper portion of its frequency profile will be greatly accentuated in comparison to when the note is continued to be held (the "sustain"). In fact, if one were to compare the "sustain" portions of the sound a trumpet and a flute, the two would be hard to distinguish, both by the ear and by a spectrum analyzer. It is the "attack" portion of the sound as well as its evolution through time that gives the trumpet and the flute its distinct characteristics.

This factor of time comes heavily into consideration when making decisions about orchestration. The timbre-harmony complex should not be looked at only as a snapshot at a specific moment in time, but as an evolving

¹⁵ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 72.

process. In Schnittke's Second Symphony this is demonstrated again and again in passages where a seemingly uniform timbre is actually a continually changing phenomenon.

Schnittke's approach to timbre becomes especially apparent in the "harmonic cloud" passages where a substantial amount of time is devoted to unfolding a single harmonic-timbral idea. For example, in the 'overtone chord' build-up passage in the second movement, "Gloria" (reh. 5 - 27), the sounding result of the music blurs the line between unfolding a harmonic and a timbral idea. This is especially effective because of the overtone-like structure of the harmony, which seems to fuse the individual instruments into a single unified sound. In light of this, the placement of the entrances of the instruments in this passage as well as the material they perform is not a contrapuntal or form-generating process, but a timbral one. The result is that of a single sound emerging, being transformed, and ultimately being terminated.

A similar interpretation can be applied to the orchestral 'swelling' effects in the third movement, "Credo." The first of these, at rehearsal 8, is carried out using a single Eb note distributed between the wind, brass, and string instruments with staggered entrances that crescendo to a single point of arrival and fade out. Since the single Eb pitch is used in all of the parts, the perceived result is that of a single evolving timbre. The staggered entrances provide an interesting shape to its evolution, while the single point of arrival emphasizes the unity of the passage. A similar 'swelling' effect at rehearsal 15 introduces a harmonic component to the design of this 'swell.' Here, the basic technique of staggering entrances and swelling to a single point of arrival is maintained, but instead of using a single Eb pitch, the instruments unfold a large symmetric chord (discussed in the previous chapter and shown in figure 11). The

symmetric character of this harmony allows the passage to be perceived not as a disparate collection of instrumental parts, but as a single unified timbre. The harmony and the timbre are fused to create a single sounding result.

Another orchestrational technique that Schnittke employs in this Symphony is Schattenklänge, or "shadow-sounds." Schattenklänge is a term that was coined by Alfred Schnittke, and brought to scholarly attention by Ronald Weitzman in his article "Schnittke and Shadow-Sounds." Weitzman purports that the idea of "shadow-sounds" arose from Schnittke's continuous need to "work in the shadows" to overcome absurd Soviet rules about what is and isn't allowed in music. Weitzman specifically points to the Second Symphony as a manifestation of this idea. According to him, the work as a whole embodies the idea of "shadow-sounds." Weitzman argues that in order to work around the strict atheist guidelines imposed on artist by Soviet authorities, Schnittke needed to 'hide' the Catholic mass that this work carries behind the guise of a symphony. This conceptual idea is thus manifested concretely in the piece's orchestration, namely the relationship between the orchestra and the choir in terms of both timbre and harmony. Weitzman traces the further development of this technique to Schnittke's work in film music and brings up the following quotation from Schnittke describing the technique:

These shadows extend the sound dimension; one perceives a second boundary lying behind the first, suspects a third perimeter, then a fourth, and so on. This opened up a new, illusory sound-space. One does not hear these shadow-sounds - and yet, no, one *does* hear them, but so faintly as to be barely audible. We don't perceive them consciously but we listen in on them unawares. Most people, supposing they comprehend music, don't know at all how this impression arises. What sort of sound it is nobody can say! But shadow-sounds there are, and they do make a difference.¹⁶

¹⁶Ronald Weitzman, "Schnittke and Shadow-Sounds," in Seeking the Soul: the Music of Alfred Schnittke, ed. Alexander Ivashkin, 11

Weitzman also points to the manner in which this technique was manifest in other works, including the "splitting off, deliberate non-synchronization" in the *Fourth Symphony*, and in the ballet *Peer Gynt*, providing another helpful descriptive quotation from the composer: "[With Neumeier] music and dance remain two dimensions, the music being the shadow of the movement, and at the same time the movement being the shadow of the music. Now, when [every detail of what's happening on stage is out of step with what's going on in the music, a consciousness of the music arises that stands independently - perception extends itself. One now senses, sees and hears - two worlds. This peculiar feeling of the non-synchronicity of the two processes [operating independently of each other] is for me very important."¹⁷

The non-synchronicity techniques that Weitzman points to are omnipresent throughout the orchestration of the Second Symphony, illustrating another key point of this chapter.

The most prominent manifestation can be heard in the very opening of the piece. The music in this section begins with an antiphonal choir placed in the rafters above the orchestra singing the music of the Kyrie that opens the mass. As shown in figure 18, at rehearsal mark 1, as the orchestra enters, it introduces a sound world which is independent from the sound world of the chorus, and which at the same time is able to combine with the chorus to create the feeling of becoming aware of another dimension.

¹⁷Ronald Weitzman, "Schnittke and Shadow-Sounds," in *Seeking the Soul: the Music of Alfred Schnittke*, ed. Alexander Ivashkin, 12



Figure 16: Opening of the first movement, "Kyrie" (score p. 2)

The most obvious way in which this passage manifests this separation is through its aleatory temporal separation of the orchestra from the chorus. While the entrance of the orchestra is synchronized with a particular moment in the choir's music, as indicated by the arrow at reh. 1, following this point of synchronization both the orchestra and the choir proceed at independent tempi in independent temporal spaces, creating the illusion of two independent events being perceived simultaneously.

The timbral-harmonic spaces of the two components of this passage are likewise independent, yet capable of being grasped as an entity. While the music of the basses of the chorus exists in the original mixolydian mode of the Kyrie chant, and the tenor line is in the dorian mode, the orchestra enters in a completely different harmonic world. Rather than being defined by an octavic mode, the harmonic world the orchestra inhabits in this section is defined by an intervallic pattern anchored on a set of central pitches. The point of anchoring for this pattern also serves as the connection between the two disparate worlds of

the orchestra and the chorus. As seen in figure figure 18, the notes C and D in the harpsichords entrance briefly coincide with the C in the basses and the D in the tenors of the chorus. This moment of coincidence provides a brief point of contact, establishing the two worlds as a single entity. The ephemeral quality of this connection is partly what gives this entrance and the subsequent passage of music it's mystical quality, as though a different dimension of the music opened up. Subsequently throughout the passage, the aleatoric placement of the two layers of material yields chance moments of seeming connection which may vary from performance to performance.

Another metaphor proposed by Schnittke comes to mind in relationship to this passage. ["Human consciousness has one peculiar characteristic: when it moves from the realm of the unconscious unrealized idea to the realm of the concrete and realized, a crucial ineffable portion of this idea is lost. This ineffable follows the idea like a shadow before it has 'crystallized.' Even the very word 'crystallization' seems to be a kind of limitation. When an idea is 'crystallized,' it's as if the idea's shell gets peeled off, and with this shell, an infinite realm of alternative possibilities is lost."] The 'schattenklänge' passage at the beginning of the Kyrie seems to be a direct manifestation of Schnittke's perspective - the plucked and percussion instruments in this passage seem to 'crystalize' the unfolded harmonic field, while the strings form its shadow. The ear does not pick up the sustained string sonority as a distinct concrete entity the way the percussion, keyboards, and harps figures act as 'crystals.' Instead, the sustained sonority is a realm of possibilities, which can be 'crystallized' in many ways.

¹⁸ Alfred Schnittke, *Besedy s Alfredom Shnitke*, ed. Alexander Ivashkin (Moscow: Kultura, 1994), 132.

Finally, the use of canons plays a role in this symphony not just as a form-structuring device, but as a timbral-orchestrational device as well. This is made most prominent in the coda of the fourth movement, where the sound of the choir is transformed using closely-knit canons at the quarter note. Rather than introducing a contrapuntal element, the use of canons imbue the choir with an interesting echo effect, akin to using a tape delay.

3.4 Conclusion

Alfred Schnittke's Second Symphony is a pivotal work in his output, and an exemplar of his compositional methods, balancing a systematic, rigorous approach with his keen intuition and vivid imagination. The conceptual premise of the work, the idea of an 'Invisible Mass,' is a powerful poetic image, which Schnittke brings to life with the way this symphony blends choral and orchestral sections, and the way pre-existing choral material is transformed into something completely new. The systematic elements of the work's compositional design provide the piece with a solid structural foundation, which nevertheless feels musical and unstilted. While many of the elements in the piece can be described in terms of a compositional algorithm, the ingredients are so carefully chosen and juxtaposed as to create a powerful artistic whole in which the underlying recipe can only be revealed through analysis. Like the other symphonies by Schnittke, the Second Symphony presents a unique and distinct poetic image and set of organizing principles, while also paying homage to classical modes of organization, such as tension and release, harmonic movement, and cyclicality. The Second Symphony is an interesting and beautiful work that stands out in Schnittke's oeuvre and holds its own in the scope of late 20th-century symphonic music.

3.5 An Appendix of Related Figures

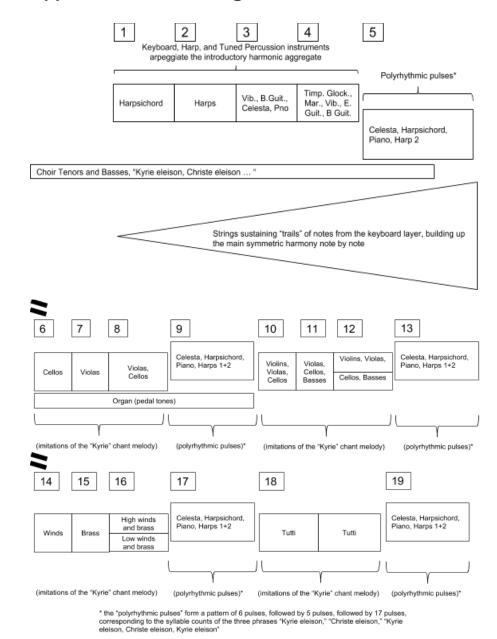


Figure 17: Form in the first movement, "Kyrie"

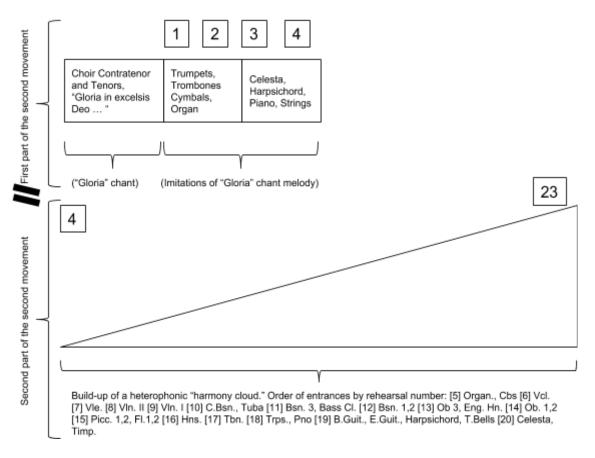


Figure 18: Form in the second movement, "Gloria"

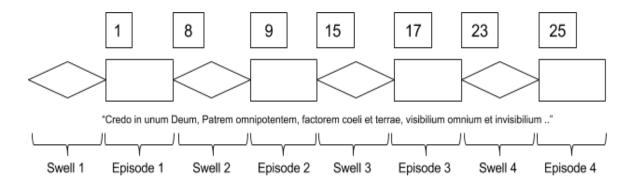


Figure 19: Form in the third movement, "Credo"

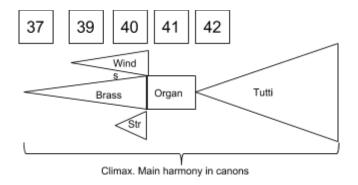


Figure 20: Form in the fourth movement, "Crucifixus"

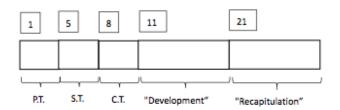


Figure 21: Form in the fifth movement, "Sanctus"

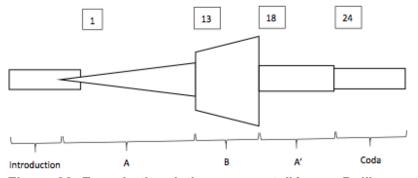


Figure 22: Form in the sixth movement, "Agnus Dei"















Figure 23: Main melody in the fourth movement, "Crucifixus"



Figure 24: Half-note pulse in the fourth movement, "Crucifixus"

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