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NEWSLETTER 1
CHRISTMAS 2025

TOWARDS A COMPOSITIONAL PROCESS

Framing the Inquiry

This project sets out to explore a compositional practice that is grounded in systematic processes while remaining attentive to listening experience and phenomenological reflection. The work is motivated by a set of intertwined questions. From the perspective of theory, how can metric and harmonic materials be systematically coordinated in ways that remain recognisable yet unpredictable? From the perspective of listening, how does such coordination shape the perception of time, pulse, and consonance, particularly when continuity is sustained and disrupted in equal measure?

The central concern is therefore not only the design of a compositional system but also the exploration of its perceptual consequences. This inquiry extends the theoretical framework developed in my doctoral thesis, which interrogated temporal disorientation in music through the lens of phenomenology, and applies it to the creation of new systems that aim to balance structural clarity with perceptual flux.

Theoretical and Phenomenological Questions

Two broad categories of questions guide this work. The first category is theoretical. It includes:

- How can metric identity be formalised into a finite set of classes and coordinated with harmonic identities?
- What kinds of rotational or permutational structures ensure systematic variety while preserving recognisability?
- How can voices be differentiated so that each has a distinct but rule-governed relationship to harmonic identity, adjacency, and projection?
- In what ways can consonant materials be recontextualised systematically, leading to their gradual defamiliarisation?

The second category is phenomenological. It includes:

- How is pulse experienced when it is alternately reinforced, suspended, and destabilised?
- What is the perceptual effect of Common-Tone Links that sustain continuity across changes of meter and harmony?
- How does systematic recontextualisation alter the listener's perception of consonance, so that familiar chords come to sound unfamiliar over time?
- How does the listener's awareness form a fluctuating narrative when the music itself avoids traditional narrative structures?

By addressing both categories together, the project aims to link the internal logic of the system to the external experience of listening.

Historical Background: The Emancipation of Consonance

The historical backdrop to this work is the long trajectory of what Schoenberg called the "emancipation of the dissonance." In early twentieth-century practice, dissonance was increasingly treated as a stable sonority rather than as something requiring resolution. This reconfiguration opened the way for twelve-tone methods and post-tonal idioms in which hierarchical distinctions between consonance and dissonance were flattened.

In late twentieth- and early twenty-first-century music, however, another turn has emerged, in which consonance itself is emancipated. Composers such as Arvo Pärt, John Tavener, and Giya Kancheli have used triads, modal collections, and consonant sonorities not as reinforcements of functional tonality but as independent resources. These consonances are not stabilising in the tonal sense; they are freed from functional progression and instead deployed in static or processual contexts.

My work stands in dialogue with this tradition but also seeks to extend it. In my system, triads and dyads remain the default material of the Harmonic Voice, yet they do not guarantee stability. Through systematic recontextualisation, consonant chords undergo what I term Consonant Defamiliarisation (CD). They become strange by being placed in ever-shifting metric, rhythmic, and contextual frames. In this way, the familiar becomes unfamiliar, much as a word repeated many times can lose its semantic clarity. Consonance is thus emancipated not only from tonal function but also from perceptual fixity.

Temporal Disorientation and Phenomenology of Listening

Another background to this project is the exploration of temporal disorientation in contemporary music. Practices such as metric modulation, non-retrogradable rhythms, and permutational structures have challenged listeners' orientation to pulse and meter. In my doctoral thesis, I argued that disorientation in such contexts is not a matter of confusion or breakdown but of heightened awareness. When listeners cannot rely on inherited formal or narrative cues, they are compelled to attend more acutely to their own fluctuating perception of time.

In this project, disorientation is produced not by abrupt changes or complex modulations but by systematic variation of familiar resources. Meter is destabilised by permutational orderings of small sets of time signatures. Pulse is alternately reinforced, suspended, and reshaped by sustained and divisive Formulae. Consonance is destabilised not by

introducing dissonance but by repeating consonant identities under continually shifting conditions. The effect is that the listener's narrative is not inscribed in the score but arises in awareness as the experience of fluctuation, continuity, and change.

The Role of Terminology

The introduction of new terminology is a crucial aspect of this work. Terms such as Meter Class (MC), Harmonic Identity (HI), Rhythmic Cell (RC), Pitch Cell (PC), Cell Group (CG), Pitch Cell Group (PCG), Coupled Permutation Scheme (CPS), Weak-Beat Window (WBW), Common-Tone Link (CTL), and Consonant Defamiliarisation (CD) are not intended to set my music apart from other music or to establish a private language. On the contrary, they are introduced to place my practice into a wider dialogue.

By defining these terms, I aim to articulate more precisely the processes by which pitch, rhythm, and meter interact in my work. This precision serves two purposes. First, it enables self-reflection. By naming the procedures I employ, I can interrogate and refine them. Second, it facilitates analysis and communication. Other analysts and composers can more easily engage with my work if the processes are described in clear, consistent terms.

Terminology in this context is therefore not exclusionary but invitational. It is a means of participating in a broader discourse about system, process, and perception in composition.

Flexibility and Active Listening in the Compositional Process

Although this project emphasises systematic processes, it does not reduce composition to rule-following. The procedures described here ground what I am generally drawn towards, but they are not the entirety of my practice. There is an active flexibility in my compositional process, inspired by what I hear while I am writing.

The system defines defaults and expectations, but in the act of composition I often respond to the emergent sound in ways that cannot be fully codified. Sometimes this involves extending a sustain longer than prescribed because the resonance feels necessary. At other times it involves delaying or anticipating a Common-Tone Link to heighten its perceptual effect. The system provides the scaffolding, but listening guides the realisation.

In this sense, the system is both rigorous and provisional. It is rigorous in that it defines precise roles for voices, precise mappings between meter and harmony, and precise rules for permutation. It is provisional in that it can be overridden in response to the emergent sound-world of a piece. The aim is not to enforce rigidity but to cultivate a framework that invites both consistency and responsiveness.

Questions of Narrative and Meaning

A final orientation for this project concerns the nature of musical narrative. In much tonal and post-tonal practice, narrative is embedded in the music through progression, development, or contrast. In this project, narrative is displaced from the score to the listener's awareness. The system avoids teleological drive and instead produces continual fluctuation. The listener's narrative is the lived experience of these fluctuations: the recognition of patterns, the perception of disruption, the awareness of continuity across boundaries, the gradual defamiliarisation of consonance.

This approach draws on phenomenological perspectives that emphasise lived time rather than abstract time. The music is not a story told to the listener but a field in which the listener's consciousness moves, noticing stability, instability, familiarity, strangeness. The significance lies not in the destination but in the continual recalibration of perception.

Structure of the Inquiry

The remainder of this thesis is organised around these guiding concerns. Subsequent chapters address:

- Meter as a structural determinant, introducing the concept of the Meter Class and its systematic permutations.
- Rhythm as a parameter generated by Formulae, Rhythmic Cells, and Cell Groups, shaping pulse perception.
- Pitch organisation through Harmonic Identities, Pitch Cells, and the Coupled Permutation Scheme.
- The role of the Adjacency Voice and the Projection Voice in articulating and mediating harmonic and metric identities.
- The perceptual consequences of these structures, with particular attention to Consonant Defamiliarisation and temporal disorientation.

Each chapter builds on the theoretical framework outlined here, while also remaining attentive to phenomenological questions of listening and perception.

In this introduction, I seek to frame the central concerns of the project: the coordination of meter, rhythm, and pitch through systematic procedures; the perceptual consequences of such coordination for pulse and consonance; the historical backdrop of the emancipation of consonance; and the phenomenological perspective that disorientation can generate awareness rather than confusion.

It has clarified that new terminology is introduced not to isolate my music but to articulate its processes in ways that invite dialogue. It has acknowledged that the system grounds but does not exhaust my compositional practice, which remains flexible and responsive to listening.

In short, this project seeks to balance theory and phenomenology, structure and perception, system and flexibility.

By situating itself in dialogue with past practices and by articulating new terms for its own procedures, it aims to contribute both to the ongoing discourse of contemporary composition and to the lived experience of listening.

Spirituality, System, and Listener-Centred Compositional Processes

The relationship between spirituality and system in composition is historically complex. On one level, systematic procedures provide the composer with clarity, structure, and discipline, enabling musical processes to unfold with a sense of inevitability. On another level, spirituality often resists system, privileging mystery, transcendence, and silence over explanation and control. My own compositional practice is situated at the intersection of these two orientations. On the one hand, I develop rigorous systems to regulate meter, rhythm, and pitch. On the other, I understand my music as an expression of faith, one that aims to create space for the listener to encounter God or at least a sense of groundedness that transcends the ordinary.

This dual orientation presents a personal dichotomy. I am compelled by the clarity of process and by the explanatory power of terminology, yet I also desire to compose music that speaks with restraint, that says very little, and that ultimately defers to the silence in which the divine may be encountered. This section explores that dichotomy by situating my practice in relation to historical examples, drawing comparisons with twentieth-century figures such as Olivier Messiaen and Arvo Pärt, and reflecting on the phenomenological consequences of listener-centred systems of composition.

Spirituality and the Use of Systems in Music

The tension between system and spirituality is not new. Composers across history have developed technical systems as ways of engaging with the ineffable. Josquin des Prez used canonic procedures that bound melodic lines into strict relationships, not for the sake of intellectual display alone but to mirror the layered interdependence of sacred text and theological symbolism. Johann Sebastian Bach developed fugue and chorale harmonisation as disciplined practices that he himself associated with spiritual devotion, often signing manuscripts with "Soli Deo Gloria." For Bach, counterpoint and proportional organisation were not merely craft but a reflection of divine order.

In the twentieth century, serial composers such as Anton Webern often framed twelve-tone technique as a quasi-spiritual discipline. Although the theology was less explicit than in Bach or Josquin, the appeal to order, rigor, and total organisation echoed a search for transcendence through system. Yet serialism also highlighted the potential tension: system could dominate expression, and spirituality could recede

into abstraction.

Against this backdrop, Olivier Messiaen represents a particularly clear model. He employed modes of limited transposition, non-retrogradable rhythms, and intricate additive processes, yet his writings consistently interpret these structures as manifestations of faith. The mathematical clarity of his systems is never divorced from theological meaning. Each procedure becomes a symbol of eternity, incarnation, or resurrection. For Messiaen, system was never an end in itself but a way of pointing beyond itself to mysteries of creation and incarnation.

Similarly, Arvo Pärt developed his tintinnabuli technique as a disciplined system of voice leading centred on triadic grounding. The system is simple to define but rich in expressive potential, and Pärt has consistently framed it as a response to his spiritual convictions. Tintinnabuli is not theology disguised as counterpoint but counterpoint opened as a space for contemplation.

In both Messiaen and Pärt, systematic devices are not opposed to spirituality but serve as the means through which spirituality is articulated. My own practice participates in this lineage, yet it also diverges in important ways. The systems I design are not primarily intended as symbolic manifestations of theology. Rather, they are pragmatic devices that enable me to work consistently with materials that I find spiritually resonant. The discipline of permutation, cycle, and systematic variation grounds my work in order, and that order becomes the frame through which listeners may encounter something beyond the purely musical.

The Listener-Centred Dimension

A key distinction in my practice is that the systems I employ are always conceived in relation to the listener. I do not regard them as abstract exercises but as frameworks that shape perception. The listener is placed at the centre of the process, experiencing the consequences of rhythmic rotation, harmonic adjacency, or common-tone continuity. This listener-centred orientation connects directly with spirituality.

From a faith perspective, music becomes a site in which the listener may encounter God, not through explicit text or imagery but through the conditions created by the composition. When pulse is suspended, reinforced, and destabilised, the listener is confronted with their own fluctuating awareness of time. When consonance is repeated to the point of defamiliarisation, the listener is invited to hear familiar material in new ways, paralleling the way spiritual practice invites the re-hearing of scripture, prayer, or ritual. The system therefore becomes a tool not only for structuring sound but for shaping the conditions of perception, and perception itself becomes the space where spiritual encounter may occur.

This differs from approaches that inscribe narrative directly into the music, where the listener is carried along a predetermined expressive arc. In my system, narrative is displaced from the score into the listener's consciousness. The meaning of the piece lies in the listener's shifting awareness rather than in any explicit message.

The Dichotomy of Saying and Not Saying

The most challenging dimension of this orientation is the dichotomy it creates for me as a composer. On the one hand, I want my music to bear witness to my faith, to communicate a sense of the divine, and to offer listeners a sense of stability and grounding. On the other hand, I feel compelled to say very little, if anything at all. The restraint is intentional. It reflects a conviction that God is best encountered not through the composer's assertions but through silence, through absence, and through the openness created by sparse, static, or systematic textures.

This dichotomy resonates with broader theological traditions. In Christian spirituality, apophatic theology emphasises the unsayable nature of God, preferring silence and negation to description. Kataphatic theology, by contrast, affirms God through images, words, and sounds. My compositional practice is caught between these poles. The system provides kataphatic structure, articulating clearly what is to be heard. Yet the restraint with which material is presented, and the refusal to impose narrative meaning, leans towards the apophatic. The music says little, but in that little, it gestures beyond itself.

This tension can be heard in the music of Pärt, where triads ring out clearly yet are surrounded by silence that denies full closure, or in Messiaen's meditative slow movements where repetition suggests eternity yet resists straightforward meaning. In my own work, the dichotomy becomes the productive space in which system and spirituality meet.

System as Spiritual Discipline

A further way of understanding the link between system and spirituality is to see compositional procedure as a form of discipline analogous to spiritual practice. Repetition, rotation, and maximal diversity can be understood as compositional analogues of prayer, liturgy, or meditation, where the repetition of familiar forms gradually opens the practitioner to new levels of awareness.

Just as liturgical prayer uses repeated words to bring the worshipper beyond the words themselves, my use of systematic repetition and variation aims to carry the listener beyond the immediate surface of the sound. The discipline of system is therefore not restrictive but liberating. It releases me from the burden of constant decision-making, allowing me to inhabit a space where listening and faith guide the

work.

This perspective aligns with traditions of monastic discipline, where repetition is not a sign of emptiness but a means of opening space for the sacred. The use of fixed HIs, repeating PCs, and rotational CPSs can be understood as compositional equivalents of these practices: consistent structures that allow openness within.

Spirituality and Defamiliarisation

The phenomenon of Consonant Defamiliarisation (CD) can also be understood spiritually. The process by which familiar chords become unfamiliar through systematic recontextualisation mirrors the spiritual process by which the familiar becomes strange when seen in the light of faith. Scripture read daily may at times feel ordinary, but at moments of grace it can suddenly appear strange and new. Prayer repeated faithfully may feel routine, yet it can suddenly open onto mystery. In the same way, a triad repeated under systematic variation can lose its ordinary function and become charged with new significance.

This alignment between spiritual practice and compositional system is not contrived but arises naturally from the way both processes engage with repetition, familiarity, and transformation. For the listener, CD may evoke not only a shift in perception but also a recognition that meaning is not fixed but continually renewed.

Historical Comparisons and Divergences

Placing my practice in dialogue with earlier composers helps clarify both continuities and divergences. Like Messiaen, I use systematic procedures that are underpinned by faith, but unlike Messiaen I do not assign explicit theological meanings to each procedure. Like Pärt, I use triadic grounding and restraint, but unlike Pärt I emphasise permutation and maximal diversity rather than simplicity and reduction. Like serialists, I deploy permutation schemes and fixed identities, but unlike serialists I remain within consonant harmonic spaces and orient the system around listening perception rather than abstraction.

This triangulation helps situate my work within a tradition of spiritually motivated systematisers while marking its distinct focus: the listener's experience of time, pulse, and consonance under conditions of systematic variation.

Phenomenology of Listening and Spiritual Encounter

The phenomenological perspective is essential for understanding the spiritual dimension of this practice. When a listener attends to a succession of bars in which HIs remain constant but their presentation changes, they are drawn into a fluctuating awareness of sameness and difference. When a CTL carries a tone across a change of meter, the listener perceives continuity amidst disruption. When consonant

chords become defamiliarised, the listener experiences the strangeness of the familiar.

These experiences are not theological assertions but phenomenological conditions. They do not proclaim God in words but open a space in which transcendence might be encountered. For some listeners, this may be explicitly religious. For others, it may be experienced as groundedness, silence, or attentiveness. In either case, the spirituality of the music lies not in what it says but in what it enables the listener to perceive.

The relationship between spirituality, system, and listener-centred composition in my work is one of tension and complementarity. Systems provide discipline, clarity, and restraint. Spirituality provides openness, silence, and transcendence. The listener is at the centre of this intersection, experiencing both the clarity of systematic unfolding and the mystery of what lies beyond it.

The dichotomy between saying and not saying remains unresolved, but it is precisely in this unresolved space that the music finds its character. The system ensures that I say very little. The spirituality ensures that what is left unsaid may yet be heard.

Meter

In this compositional system, meter is understood not as a neutral backdrop or as a flexible notational convenience, but as the primary structural determinant of musical organisation. In much conventional practice, time signatures are adopted in order to notate rhythmic patterns, to clarify phrase structures, or to respond to the demands of text setting. Their function is descriptive rather than generative. In the present approach, time signatures are elevated into structural objects. Each time signature participates in a closed set that determines rhythmic organisation, harmonic identity, and large-scale organisation. Meter therefore ceases to function as a subsidiary category and instead becomes the central compositional resource.

This chapter introduces and defines the core terminology through which meter is deployed in my compositional system: the Meter Class Set (MCS), Meter Classes (MCs), Formulae (F), Permutations (P), Combinations (C), Meter Cycles (MCy), and Cycle Chains (CC). It also outlines the ways in which the Harmonic Voice (HV), Adjacency Voice (AV), and Projection Voice (PV) are inseparably conditioned by meter, before introducing the principle of Maximal Diversity (MD), which ensures a systematic distribution of relationships between meters. The focus throughout is on how these operations generate music that systematically shapes the listener's perception of time.

Meter Class Sets and Meter Classes

The Meter Class Set

(MCS) is defined as the complete collection of time signatures employed in a composition. Once the MCS is fixed, no bar of music may exist outside it. This principle means that meter is not subject to arbitrary change during the compositional process but is restricted to a pre-determined palette. The decision about which meters to include, and how many, is therefore one of the most significant structural choices in the system.

The size of the MCS directly affects the scale and perceptual character of the work. A small MCS, for example consisting of only two meters such as {3/4, 4/4}, produces a tightly constrained space. Each Meter Class (MC) recurs frequently, and the listener quickly learns to expect one of a small number of options. The result is a relatively stable form of temporal disorientation, in which the listener recognises that something is shifting in the metric grid but also senses the limitations of the system. The alternation between three beats and four beats produces small perturbations that gradually accumulate, creating an unstable flow that is nonetheless grounded in continuity. By contrast, a larger MCS such as {3/4, 4/4, 5/4, 7/8, 11/8} generates an expanded possibility space. Recurrence of any given MC is delayed, predictability is reduced, and instability is intensified. The listener cannot easily anticipate the return of a specific meter, and the sense of continuity is correspondingly weakened. The size of the MCS is therefore not merely a quantitative decision but a qualitative one, determining whether temporal disorientation is experienced as gradual and cumulative or as immediate and disruptive.

Each individual MC is more than the symbolic representation of a time signature. It is a multidimensional object consisting of three attributes. The first is the notated time signature itself, such as 3/4, 4/4, or 7/8, which provides the durational grid for the bar. The second is a harmonic identity, which is consistently realised whenever that MC appears. The third is a collection of Formulae (F), which are short rhythmic motifs specific to the MC. The F articulate the metric grid, and their recurrence establishes the characteristic rhythmic surface of each meter.

An MCS of {3/4, 4/4} demonstrates how MCs function in practice. Each time a bar of 3/4 occurs, it activates the same harmonic identity and is articulated through one of the F belonging to the 3/4 class. Each time a bar of 4/4 occurs, it activates its own harmonic identity and its own F. The alternation between these two meters produces continuity, since both are familiar and recur frequently, but the alternation also produces instability, since the number of beats shifts from bar to bar. By contrast, a MCS of {3/4, 7/8} produces sharper disruption. The grouping of beats in 7/8 requires recalibration with every change, so that

the listener experiences a sequence of metric reorientations rather than a gradual destabilisation of flow. The design of the MCS therefore establishes in advance the balance between coherence and disorientation in the composition.

Voices and Pitch Organisation in Relation to Meter

Although a full account of voice behaviour is reserved for another chapter, it is important here to explain how the Harmonic Voice (HV), the Adjacency Voice (AV), and the Projection Voice (PV) function in relation to meter. Each MC specifies not only its durational grid but also its harmonic identity and F. These attributes regulate the behaviour of the voices, so that their activity is inseparably tied to the choice of meter.

The HV is the carrier of the harmonic identity associated with the current MC. When a bar in 3/4 appears, the HV realises the harmonic identity of 3/4. When that meter recurs, the HV presents a variant, ensuring that recurrence produces difference as well as familiarity. The AV is always defined in relation to the HV. It introduces small-scale motion by positioning itself adjacent to the harmonic material of the HV. The PV shadows the AV and pulls its motion back into alignment with the HV. The three voices therefore operate as a system of stability, motion, and resolution, but the rules by which they function are entirely determined by the MC that governs the bar.

The role of F is to provide rhythmic articulation. Each MC is associated with a finite set of F, and only these may be used to realise the bar. A bar of 3/4 is always articulated through one of the F of the 3/4 class, and a bar of 5/4 is always articulated through one of the F of the 5/4 class. Because the voices are bound to these F, rhythmic identity is inseparable from metric identity.

An MCS of {3/4, 5/4} illustrates this principle. Each time a 3/4 bar appears, the HV activates the harmonic identity of the 3/4 class, and the AV and PV adjust their behaviour accordingly. Each time a 5/4 bar appears, the harmonic identity and rhythmic F of 5/4 are activated instead. Even if the harmonic content underlying the two MCs is similar, the difference in metric grid and F ensures that the voices behave differently in each case. This dependence demonstrates the absolute link between meter and voice organisation in the system.

Permutations, Combinations, and Meter Cycles

The sequence in which MCs appear is defined using the concepts of Permutation (P) and Combination (C).
A P is a specific ordering of all the MCs in the set. If the MCS is {3/4, 4/4, 5/4}, one possible P is 3/4 followed by 4/4 followed by 5/4. Another possible P is 5/4 followed by 3/4 followed by 4/4. Each distinct ordering constitutes a different P. Realising a P produces a

Meter Cycle (MCy), which is defined as one traversal of the entire MCS. An MCy therefore contains as many bars as there are members of the MCS.

A C differs from a P in that it is not sensitive to order. From the MCS {3/4, 4/4, 5/4}, Cs include {3/4, 4/4}, {3/4, 5/4}, and {4/4, 5/4}. A C specifies which MCs appear together but does not specify their sequence. Cs are useful for describing subsets of the MCS and for understanding how smaller collections may be embedded within larger ones. In practice, however, the system privileges Ps, since the ordering of MCs is what determines the listener's experience of temporal continuity and disruption.

The total number of Ps of an MCS is given by the factorial function n!, where n is the number of members in the set. An MCS of size three has six Ps, an MCS of size four has twenty-four, and an MCS of size five has one hundred and twenty. Each P produces an MCy containing n bars, so that the total number of bars in a full traversal of all Ps is $n \times n!$. For an MCS of {3/4, 4/4, 5/4}, this results in eighteen bars in total, since each of the six Ps generates a cycle of three bars. The listener therefore encounters each meter in every possible position relative to the others, ensuring that no ordering context is excluded.

Cycle Chains and Formal Design

A Cycle Chain (CC) is defined as a sequence of MCys. It provides the large-scale formal design of the composition. The length of the chain, the number of Ps realised, and the number of cycles concatenated determine the duration and scale of the work.

At the beginning of a CC, the listener encounters metric changes that may appear unpredictable or even arbitrary. Over time, however, the recurrent operation of rules becomes perceptible. Each MC always carries the same identity, consisting of its harmonic frame and its F, and the behaviour of the HV, AV, and PV remains consistent with these attributes. Even though the order of MCs continues to shift, the recurrence of identity ensures coherence. The CC therefore operates at the intersection of predictability and unpredictability. The order of meters is unpredictable, but the identity of each meter is predictable and consistent.

An MCS of {3/4, 4/4, 5/4, 7/8} demonstrates this interaction. In one cycle, the order may be 3/4, then 7/8, then 5/4, then 4/4. In another cycle, the order may be 7/8, then 4/4, then 3/4, then 5/4. Each cycle presents a different P, but across cycles the listener recognises the recurrence of each MC with its fixed attributes. The result is a form in which the listener is continually reoriented by shifting orders but anchored by invariant identities.

Maximal Diversity

The principle of Maximal Diversity (MD) ensures that each MC is experienced in every possible ordering context relative to the others. In combinatorial terms, MD requires that all possible relationships between members of the MCS are realised at least once.

Applied to meter, this principle means that every MC must be heard following every other MC, preceding every other MC, and occupying every possible position within a cycle. If only a single ordering such as 3/4, 4/4, 5/4 were used, the listener's experience of 5/4 would be partial and restricted, since it would always follow 4/4 and never precede it. By contrast, if all six Ps of {3/4, 4/4, 5/4} are realised, then 5/4 is heard after 3/4 in some cycles, before 4/4 in others, and in each position within the cycle across the whole set. The same is true for 3/4 and 4/4. The result is that no possible ordering context is excluded from the listener's experience.

For the listener, MD produces temporal disorientation that is evenly distributed across the entire possibility space. Because all orderings are eventually realised, no transition becomes fixed or predictable. At the same time, coherence is maintained because the identity of each MC remains constant across all its appearances. Predictability operates at the level of identity, while unpredictability operates at the level of sequence. The listener therefore experiences both stability and instability, both recognition and surprise, in a systematic and balanced way.

This approach differs from conventional uses of variety in composition, where contrast is often selectively introduced and balanced with recurrence. In this system, variety is exhaustive. Every possible relationship is realised, and the listener's engagement is with the unfolding of a complete set of possibilities rather than with a narrative of selective return. The experience of time becomes an exploration of systematic potential rather than a sequence of thematic variations.

Temporal Experience

The regulation of temporal experience is the primary aim of the system. Temporal disorientation is not a by-product but the central perceptual consequence of the operations described above. Crucially, this disorientation arises from systematic structures rather than arbitrary irregularity.

When the MCS consists of closely related meters, temporal disorientation is incremental. The listener perceives a continuous flow that is unsettled by subtle perturbations. An MCS of {3/4, 4/4} produces such an effect. The alternation between near-equivalent meters preserves a sense of continuity while introducing recurrent instabilities. When the MCS consists of contrasting meters, temporal disorientation is immediate and pronounced. Each new bar compels the

listener to reorient to a different metric grid. An MCS of {3/4, 7/8, 5/4, 11/8} produces this sharper form of disruption, as the listener must recalibrate constantly.

The size of the MCS amplifies or reduces these effects. Smaller sets produce predictability through frequent recurrence. Larger sets expand the possibility space and defer recurrence, producing greater unpredictability. The use of Ps and the pursuit of MD further condition this effect. The listener perceives not only the immediate surface but also the cumulative unfolding of rules across time. The alternation between stability and instability, predictability and unpredictability, becomes the defining characteristic of temporal experience in the system.

Meter in this compositional system functions as the generator of rhythm, harmonic behaviour, and form. The MCS defines the field of metric possibilities. Each MC is a multidimensional object that combines a metric grid, a harmonic identity, and rhythmic F. The HV, AV, and PV regulate activity within each bar and are inseparably conditioned by the meter. Ps generate MCys, Cs describe subsets, and CCs provide large-scale design. The pursuit of MD ensures that every possible relationship between MCs is eventually realised.

The result is a system that produces a controlled experience of temporal disorientation. Depending on the design of the MCS, this disorientation may be gradual or pronounced, predictable or unpredictable. In every case, it is produced not by arbitrary irregularity but by systematic operations that bind meter, voice behaviour, and form into a single compositional grammar.

Rhythm

In this compositional system, rhythm is not conceived as a secondary feature applied to a harmonic or melodic framework, but as a structural determinant. Rhythm is treated on the same level of significance as meter and harmony. Each operates as a generator of musical material and as a regulator of perceptual experience. In much traditional practice, rhythm is approached through expressive variation or through idiomatic convention. By contrast, in this system rhythm is formally defined and rigorously controlled, bound to the metric and harmonic identities of the Meter Classes (MCs) that constitute the work.

The aim is to ensure that rhythm functions both as a source of consistency and as a source of variety. Consistency is guaranteed by assigning each MC a repertoire of rhythmic behaviours that cannot be transferred to other meters. Variety is guaranteed by systematically rotating between these behaviours so that no MC recurs with the same rhythmic articulation in immediate succession. Rhythm therefore reinforces

the recognisability of each MC while simultaneously preventing predictability.

Because rhythm is not free but regulated, the listener's experience of pulse becomes central. Pulse in this system is not given but continually shaped, reinforced, suspended, or destabilised. Pulse is experienced differently in the Harmonic Voice (HV), the Adjacency Voice (AV), and the Projection Voice (PV). Each voice contributes differently to the articulation of pulse: the HV may obliterate it through sustain, reinforce it through division, or reshape it through arpeggiation; the AV may unsettle it through systematic rotation of Rhythmic Cells (RCs); and the PV may stabilise it by projecting adjacency into continuity through Common-Tone Links (CTLs). The result is that the listener's perception of pulse is never static, but fluctuates across the composition.

This chapter defines the rhythmic system in detail. It introduces Formulae (F), distinguishing between sustained Formulae (Fs) and divisive Formulae (Fd). It explains the role of RCs and Cell Groups (CGs) in the AV, and shows how the PV mirrors AV rhythm while tethering it back to the HV through CTLs. Throughout, examples have been given, demonstrating how each element interacts with pulse. Finally, a detailed pulse study is presented, tracing how the listener's sense of pulse changes across a sequence of different MCs.

Formulae and Their Function

A Formula (F) is defined as a rhythmic archetype associated with a specific MC. Each F is inseparable from its MC. In practice this means that an F defined for 3/4 can never be transferred to 4/4 or 5/4. The rhythmic identity of each MC is therefore closed and self-contained.
Two broad categories of F are distinguished: sustained Formulae (Fs) and divisive Formulae (Fd). Fs fill the entire bar with a single event. In 3/4 this corresponds to a dotted minim, in 4/4 to a semibreve, in 5/4 to a semibreve tied to a crotchet, in 7/8 to a dotted minim tied to a minim, and in 11/8 to a semibreve tied to a dotted minim plus a crotchet. In each case the Fs suspends the perception of pulse. The bar is not articulated into subdivisions but experienced as a continuous duration.

Fd divide the bar into multiple events. In 3/4 this may be three crotchets or two dotted crotchets. In 4/4 this may be four crotchets or two minims. In 5/4 this may be five crotchets, a 2+3 grouping, or a 3+2 grouping. In 7/8 this may be 2+2+3 or 3+2+2. In 11/8 this may be 3+3+3+2 or 2+2+3+4. The effect of Fd is to reinforce the subdivisions of the bar and to project a sense of pulse.

The alternation between Fs and Fd produces a systematic oscillation between suspension and articulation. If the same MC recurs multiple times in a Cycle Chain, its Fs and Fd are rotated so that it never appears with the same rhythmic

articulation in immediate succession. This ensures that the identity of the MC is consistent, yet the listener cannot anticipate the precise articulation.
From the perspective of pulse, Fs obscures or suspends it, while Fd reinforces it. The balance between Fs and Fd is therefore central to the perceptual character of the music. Sustained spans create continuity, while divisions articulate beats and groups. The systematic alternation between them prevents either continuity or articulation from becoming monotonous.

Rhythmic Cells and Cell Groups
While F regulate the overall articulation of each bar, the AV requires a finer level of rhythmic organisation. For this purpose the system introduces Rhythmic Cells (RC) and Cell Groups (CG).

An RC is the smallest rhythmic unit assigned to the AV. An RC may be as simple as a crotchet or as complex as a short sequence such as quaver-quaver-crotchet. RCs are always tied to the metric structure of the MC to which they belong.

A CG is a collection of three RCs assigned to a given MC. The RCs are labelled a, b, and c. The AV rotates systematically through these RCs whenever the MC recurs. At the first appearance of the MC, the AV realises RCa; at the second appearance, RCb; at the third, RCc; and at the fourth, RCa again. This systematic rotation ensures that successive appearances of the same MC never sound rhythmically identical, but also that the identity of the MC is preserved, since all three RCs are bound to the same meter.

In 3/4, CG(3/4) may consist of three crotchets, two dotted crotchets, and crotchet plus minim. Each RC articulates the pulse differently. Three crotchets reinforce the regularity of the beat, two dotted crotchets stretch the bar into two uneven halves, and crotchet plus minim creates asymmetry. In 5/4, CG(5/4) may consist of a 2+3 grouping, a 3+2 grouping, and five even crotchets. Each creates a different perception of quintuple time: the first projects duple followed by triple, the second triple followed by duple, and the third erases grouping by projecting equality. The listener therefore hears the same quintuple meter articulated in three different rhythmic guises.

The systematic rotation of RCs unsettles the sense of pulse. The listener learns to associate each MC with a particular rhythmic palette, but cannot predict which member of the palette will occur at any given time. Pulse is therefore not fixed but fluctuates within a range of possibilities.

The Harmonic Voice and Rhythm
The Harmonic Voice (HV) realises the harmonic identity of each MC. Rhythm in the HV is determined by how this harmonic identity is distributed across the bar. Three strategies are available: chordal sustentation, chordal division, and chordal arpeggiation.

Chordal sustentation corresponds to Fs. The HV sustains a chord across the full duration of the bar: a dotted minim in 3/4, a semibreve in 4/4, a semibreve tied to a crotchet in 5/4, a dotted minim tied to a minim in 7/8, or a semibreve tied to a dotted minim plus a crotchet in 11/8. In each case the bar is filled with a single sustained event. Pulse is suspended, and the listener experiences continuity rather than subdivision.

Chordal division corresponds to Fd. The HV divides its harmonic material into multiple events within the bar. In 3/4 this may be two dotted crotchets. In 4/4 it may be two minims. In 5/4 it may be a 2+3 grouping. In 7/8 it may be 2+2+3. In 11/8 it may be 3+3+3+2. These divisions articulate beats or groups and reinforce pulse.

Chordal arpeggiation is a third strategy, in which the HV unfolds its harmonic material across time. The rhythm of the arpeggiation is determined by the F of the MC. If the bar is realised as three crotchets, the chord may be arpeggiated into three tones one per beat. If the bar is realised as 2+3, the chord may be arpeggiated as a dyad across two beats followed by a triad across three beats. If the bar is realised as 2+2+3, the HV may sustain pitches in the duple groups and arpeggiate three notes in the triple group. Arpeggiation therefore integrates harmonic content with rhythmic articulation, reshaping the listener's perception of pulse into a contour of motion.

These three strategies affect pulse differently. Sustentation suspends it, division reinforces it, and arpeggiation reshapes it. By alternating between these strategies, the HV maintains both consistency and variety in its rhythmic presentation.

The Adjacency Voice and Rhythm

The Adjacency Voice (AV) is defined by adjacency to the HV. Rhythm in the AV is generated by the systematic rotation of RCs within CGs. This means that the AV is more rhythmically active than the HV and contributes to the articulation of pulse. In 3/4, the AV may alternate between reinforcing the beat through three crotchets, stretching the bar into two unequal halves through two dotted crotchets, and creating asymmetry through crotchet plus minim. In 5/4, the AV may alternate between projecting duple then triple, projecting triple then duple, and erasing grouping through five equal crotchets.

The systematic rotation of RCs prevents predictability. The listener learns to associate the MC with its CG but cannot predict which RC will occur at any given moment. Pulse therefore becomes unstable, fluctuating between different articulations. The AV contributes directly to temporal disorientation by ensuring that pulse is never fully secure.

The Projection Voice and Rhythm

The Projection Voice (PV) shadows the AV rhythmically but projects it back into the harmonic identity of the HV. The PV always adopts the same RC as the AV, but its pitch content is regulated by Common-Tone Links (CTLs).

A CTL is the set of pitches shared between the harmonic identities of two consecutive MCs. When CTLs exist, the PV selects them and articulates the RC accordingly. If a 3/4 bar is followed by a 5/4 bar and both share a common tone, the PV may repeat this pitch across the two bars, using the RC to articulate it. If no CTL exists, the PV resolves by nearest neighbour into the harmonic identity of the HV.

This has important consequences for pulse. Because the PV mirrors the RC of the AV, it participates in the same rhythmic articulation. However, because the PV privileges CTLs, it often produces rhythmic articulations that are consistent across metric boundaries. The listener therefore perceives continuity of pulse across bars that might otherwise appear disruptive. When CTLs are absent, the PV shifts by nearest neighbour, producing a slight disruption of pulse. In either case, the PV ensures that pulse is not entirely fragmented but redistributed between stability and instability.

Pulse Study

The interaction of HV, AV, and PV creates a fluctuating perception of pulse. To understand this interaction, it is useful to trace how pulse is experienced across a sequence of different MCs. Consider the succession 3/4, 5/4, 7/8.

In the 3/4 bar, the HV sustains a dotted minim, suspending pulse. The AV realises three crotchets, reinforcing beat articulation. The PV mirrors these crotchets but privileges CTLs, perhaps sustaining a pitch across the bar while articulating it rhythmically. The listener perceives a stable pulse articulated by the AV and PV but suspended by the HV. In the 5/4 bar that follows, the HV divides into a 2+3 grouping, reinforcing pulse through unequal subdivision. The AV realises RCb of CG(5/4), perhaps a 3+2 grouping, unsettling the listener by projecting triple then duple. The PV mirrors this grouping but anchors it through a CTL shared with the 3/4 harmonic identity. Pulse is destabilised by the shift from triple to quintuple time, but continuity is provided by the PV's use of CTLs.

In the 7/8 bar, the HV arpeggiates its chord according to a 2+2+3 division, reshaping pulse into a contour of motion. The AV realises RCc of CG(7/8), perhaps seven even quavers, erasing grouping in favour of equality. The PV mirrors these quavers but anchors them through CTLs with the 5/4 harmonic identity. Pulse is radically unsettled by the shift into irregular groupings, yet continuity is preserved through the PV.

The listener therefore experiences a sequence in which pulse is alternately reinforced, suspended, reshaped, destabilised, and anchored. Each voice contributes differently: the HV regulates pulse through sustain, division, or arpeggiation; the AV unsettles pulse through rotation of RCs; and the PV anchors pulse through CTLs. The result is a continually fluctuating perception of time.

Rhythm in this compositional system is generated by systematic procedures. Each MC carries a set of Formulae (F) that define its rhythmic identity. The Harmonic Voice (HV) alternates between chordal sustentation, chordal division, and chordal arpeggiation, suspending, reinforcing, or reshaping pulse. The Adjacency Voice (AV) rotates systematically through Rhythmic Cells (RC) in Cell Groups (CG), unsettling pulse through variety within consistency. The Projection Voice (PV) mirrors the AV's rhythm while tethering it back into the HV through Common-Tone Links (CTL), creating continuity across metric boundaries.

The perceptual consequence is that rhythm regulates the listener's sense of pulse. Pulse is not given but continually negotiated, suspended in some contexts, reinforced in others, reshaped or destabilised by adjacency, and stabilised again by projection. By binding rhythm to meter and harmony in this way, the system produces a balance of predictability and unpredictability, coherence and disorientation. Rhythm therefore functions as a generator of temporal perception within the compositional grammar, ensuring that the listener's experience of time is continually recalibrated.

Pitch Material and Voice Allocation

Pitch in this system functions as a structural parameter that is inseparable from meter and rhythm. Every Meter Class (MC) is paired with a fixed harmonic resource in the Harmonic Voice (HV), and the Adjacency Voice (AV) and Projection Voice (PV) operate within and around that resource using precisely defined procedures. The resulting grammar ensures that pitch materials are both recognisable and continually recontextualised by rhythmic and metric operations.

The present chapter sets out the rules by which pitch is selected, distributed, and permuted, and explains the perceptual consequences of these rules for consonance, continuity, and defamiliarisation over time. It will demonstrate that the link between pitch and meter is absolute, that the Adjacency and Projection Voices extend and mediate that link, and that repetition under systematic variation leads to an emancipation of consonance from its traditional function.

Mapping meters to harmonic resources

Each time signature in the Meter Class Set (MCS) is assigned a single, stable harmonic resource in the HV. This chapter formalises that resource as the Harmonic Identity (HI). For an MCS of cardinality four there are four HIs, one per MC. Although the system is triad-oriented in conception, an HI may be realised as two or three tones in many contexts and as a larger sonority when required. What matters is not the number of pitch classes but the stability of the identity.

The HI therefore acts as a chordal grounding for its MC, realised as a vertical sonority, as an arpeggiation aligned to the class's Formulae (F), or as a hybrid that alternates vertical and linear presentation across successive occurrences. The mapping between MC and HI is exclusive and fixed for the duration of the work. A bar notated in a given meter must realise the HI assigned to that meter in the HV. This mapping preserves identity as the composition traverses permutations of meters.

The listener consequently learns the association between a metric grid and its harmonic anchor, yet that anchor is presented under varied rhythmic and registral guises. In practice this means that even a simple dyad can carry the full harmonic identity of a class if it is consistently used as its marker. By contrast, a more complex HI, such as a four- or five-note sonority, may be distributed over time without losing recognisability.

To make the mechanism concrete, consider an MCS whose 3/4 class is assigned an HI equivalent to a d minor triad and whose 4/4 class is assigned an HI equivalent to an a minor triad. The 3/4 bars always realise the D minor HI in the HV, while the 4/4 bars always realise the A minor HI. Although the registral layout, voicing, and rhythmic surface can vary according to the Formulae of each meter, the identity of each HI remains constant whenever its meter returns. Over time, the listener develops the expectation that D minor signifies 3/4 and A minor signifies 4/4, yet each return destabilises that expectation by presenting the chord in a different rhythmic and registral guise.

The Adjacency Voice: chordal adjacency and controlled passing tones

The AV is defined by its adjacency to the HV. Its pitch material is drawn primarily from the current HI, articulated through the Rhythmic Cells (RCs) of the current Cell Group (CG). In order to generate motion without undermining the stability provided by the HV, the AV may introduce stepwise non-chord tones as passing material on metrically weak positions. To make this governable and meter-specific, this chapter introduces the Weak-Beat Window (WBW).

The WBW of an MC is the set of metric positions designated as weak by that class's Formulae and by its RCs. Passing tones are permitted only inside the WBW and must resolve by step to a member of the HI before the next strong position is articulated. This rule ensures that non-chord tones never usurp the role of harmonic anchoring that belongs to the HV. Instead, they function as local inflections, audible as brief deviations that always return to stability.

The size and distribution of the WBW change with the meter and with the chosen Formulae. In 3/4, three crotchet beats produce a straightforward hierarchy of strong followed by weak positions according to the Formula in use. In 5/4 realised as 2+3, the first beat of each group is strong, the interior quavers may function as a WBW, and a passing tone introduced in the first group must resolve to an HI tone before the onset of the second group. In 7/8 realised as 2+2+3, the first quaver of each group is strong, the second quaver of the duple groups and the second quaver of the triple group constitute the WBW, and passing motion must be locally contained. The AV is therefore active but rule-bound, drawing motion from the metric design rather than from free melodic invention.

The perceptual result is that the AV sounds alive and mobile but never destabilises the harmonic function of its MC. Its passing tones are not ornamental in a Romantic sense but structural in a systematic sense: they belong to the metric logic of the WBW.

The Projection Voice: continuity through common tones

The PV shadows the AV rhythmically but selects its pitches according to commonalities between successive HIs. This principle is implemented by the Common-Tone Link (CTL). When two consecutive bars belong to different MCs, the PV searches for tones common to both HIs and privileges them as carriers of continuity.

If a 3/4 bar with the D minor HI is followed by a 4/4 bar with the A minor HI, the PV will often articulate the pitch a across the barline because it belongs to both HIs. If no common tone is available, the PV resolves by nearest neighbour into the target HI at the earliest weak position available in the WBW, thereby maintaining continuity of motion even in the absence of literal commonality.

Because the PV shares the AV's rhythm but not its selection criterion, it acts as a stabilising counterweight. The listener hears continuity across metric boundaries as the PV threads common material through changing meters, while the AV highlights local adjacency and passing motion inside the current meter. The result is a layered perception of time in which stability and motion are distributed across voices.

The perceptual importance of CTLs is heightened in long Cycle Chains, where maximal diversity of meter order can produce disorientation. A CTL provides a kind of pulse anchor across different contexts: even when the metrical and rhythmic grids shift, the listener perceives continuity because one pitch is projected steadily across changes.

Pitch structuring below the chord: Pitch Cells and their grouping

To regulate the choice of tones within the HI and to coordinate pitch with rotation in rhythm, the system introduces the Pitch Cell (PC) and the Pitch Cell Group (PCG). A PC is a minimal ordered selection of tones from the current HI, optionally including one non-chord tone if and only if that tone appears at a position authorised by the WBW. A PC is not a motive in the thematic sense but a short rule for which chord members appear and in what local order.

A PCG is the finite set of PCs assigned to an MC. In practice, a PCG contains two or three PCs, labelled a, b, and c, and is unique to that MC. For a 3/4 class whose HI is d minor, a PCG might be defined so that PC a comprises the chord members d, f, and a in some order, PC b comprises f, a, and d, and PC c comprises a, d, and f. If the Formula in force allows a WBW on the second beat, PC b may optionally interpolate a stepwise passing e between d and f at that position. For a 5/4 class with a distinct HI, a PCG may select three chord members for its PCs but distribute them across the 2+3 grouping so that PCs respect both harmonic membership and metric grouping.

The purpose of PCs is twofold. First, they guarantee that the AV and PV draw on the same harmonic source as the HV, even when they move. Second, they make possible a controlled use of permutation that produces variety that is audible as systematic rather than arbitrary.

Coordinating rhythm and pitch through permutation

Because both rhythm and pitch are organised into small finite groups unique to the MC, it is natural to coordinate their rotations. This chapter introduces the Coupled Permutation Scheme (CPS). The CPS is the pairing of a CG for rhythm and a PCG for pitch under a single permutation schedule of length two or three. If the PCG for an MC has three members, labelled a, b, and c, the CPS cycles the order of PCs according to the full set of permutations of three, while the RCs of that MC rotate in tandem under their own three-member group.
The combined surface thus presents systematically varied pairings, such as PC order abc in the first appearance, acb in the second, bac in the third, bca in the fourth, cab in the fifth, and cba in the sixth, while the rhythmic order simultaneously rotates through its own a, b, c sequence.

The CPS can also operate in length two when the MC is assigned only two PCs, in which case the system alternates between ab and ba while the rhythmic group alternates between its two patterns. The effect is to keep the class's identity tightly focused while still preventing exact repetition.

Two adjustments keep the CPS musically tractable. First, alignment between the pitch permutation and the rhythmic permutation may be maintained or deliberately offset by a fixed phase, depending on the desired strength of repetition. A zero-phase CPS reinforces recognisability because the first item of the PCG is always heard with the first item of the rhythmic CG, and so on. A nonzero phase introduces slight misalignment that increases variety while leaving the underlying order perceptible. Second, the PV need not always adopt the same PC as the AV. When a compelling CTL requires it, the PV may retain the previous PC's terminal tone into the next bar while still matching the AV's RC. This preserves continuity without breaking the rhythmic coordination.

Vertical presentation, arpeggiation, and registral policy in the Harmonic Voice

The HV can present the HI vertically, linearly, or in hybrid form, but the choice is rule-governed by meter and Formula. Vertical presentation reinforces the perception that the meter is anchored to a chordal ground. Linear presentation through arpeggiation keeps the same chordal ground but distributes its tones across the bar according to the Formula. When the 3/4 Formula is three crotchets, an HI with three tones can be presented as one tone per beat, creating a clear alignment of chord members with the metric grid. When the 5/4 Formula is 2+3, a dyad drawn from the HI may occupy the first group and a triad may occupy the second. When the Formula is sustained, the HI can be presented as a fused vertical sonority or as a slow arpeggiation whose entries overlap, retaining the percept of a single extended event.

Register is constrained when necessary to safeguard voice roles. If the HV holds a low register to project stability in a sustained Formula, the AV may operate in a neighbouring register so that its passing tones are audible as motion and not as overtone coloration. When a long CTL is projected by the PV, the HV can deliberately avoid that register at the next onset, increasing the salience of the link without adding density. These decisions are not arbitrary but are entailed by the aim of keeping roles distinct while letting the same HI support diverse surface articulations.

The Adjacency Voice within the PCG and the WBW

Because the AV articulates local motion, its PCs must honour the WBW. The

WBW ensures that any non-chord tone is metrically subordinate and stepwise. In a 4/4 bar whose HI supplies three available chord tones, the AV may select PC a as an ordered pair of two different chord members on beats one and three with a single passing tone on beat two inside the WBW, resolving to a chord member by beat three. In a 7/8 bar realised as 3+2+2, the WBW includes the second quaver of each group, so the AV may touch a passing tone on those positions only, immediately resolving to an HI member on the next strong quaver. If the Formula is entirely sustained, the WBW collapses and passing tones are suppressed. The AV then chooses a PC that is chordal only, allowing rhythm and register, rather than non-chord tones, to supply variety.

The Projection Voice across PC permutations and meter changes

The PV is bound rhythmically to the AV but privileges CTLs when choosing pitch. Because PCs are ordered, a CTL can be extended across the boundary between PCs and between meters by selecting the terminal tone of the previous PC as the initial or central tone of the next PC when that tone belongs to both HIs. Returning to the 3/4 D minor to 4/4 A minor succession, if the AV completes PC b on tone A at the end of the 3/4 bar, the PV may hold or reiterate a through the onset of the 4/4 bar while adopting the rhythmic pattern of the new bar. If the next transition offers no CTL, the PV treats the first available WBW position as a pivot by nearest neighbour into the new HI, thereby minimising perceived rupture. Because the PV anchors continuity, it can bear a perceptual trace of pulse through successive changes of meter. A tone sustained or reiterated on comparable positions across adjacent bars can provide a steady referent even when the AV is cycling through different RCs and PCs. This is particularly useful in long Cycle Chains where maximal diversity of order may otherwise lead to cumulative disorientation.

Emancipation of the consonance

The system is intentionally consonant at the level of its HIs. Triads and dyads remain the default material of the HV. Yet the perceptual experience is not one of tonal transparency. Instead, consonant materials are progressively defamiliarised by systematic recontextualisation. This chapter formalises that process as Consonant Defamiliarisation (CD).

CD names the phenomenon in which repeated encounters with the same consonant HI cease to sound familiar because surrounding conditions change in a controlled but exhaustive way. The surrounding conditions include meter order, Formula selection, PC and RC permutation under the CPS, WBW availability for passing tones, and the presence or absence of CTLs. The cognitive analogy is the well-known effect in which a familiar word loses its apparent meaning when repeated

in rapid succession. Here the loss of immediate familiarity does not arise from simple repetition but from repeated reclassification of the same consonant material within new metric, rhythmic, and contextual frames. When a 3/4 d minor HI is heard after different predecessors and before different successors, with different Formulae in the HV, with different RCs in the AV, with different PCs ordering the chord tones, and with different CTLs in the PV, the perceptual category of d minor is repeatedly reanchored.

Consonance is emancipated from its ordinary function as a guarantor of stability because its perceptual effect is no longer stable in itself. The consonant chord becomes a variable whose meaning is determined by its systematic placement within the Meter Cycle and Cycle Chain.

CD is not an aesthetic of disruption for its own sake. It is the predictable outcome of maximal diversity in ordering combined with strict identity within each MC. Identity is preserved locally by the fixed HI and the permitted PCs. Variety is introduced globally by the CPS and by meter permutations. The listener learns the identity of each consonant resource but stops hearing it as obvious and self-explanatory, since its role is continually recalculated by the rules.

Practical design sequence

A practical workflow emerges naturally from these definitions. First, select the MCS and assign each MC an HI that is triad-oriented but flexible in voicing. Second, define the Formulae for each MC, including sustained and divisive options. Third, for each MC, author a PCG of two or three PCs that order chord tones and designate where a single passing tone is allowed under the WBW. Fourth, define the CG for rhythm and the CPS that coordinates rhythmic and pitch rotation. Fifth, specify the CTLs between every ordered pair of adjacent HIs and a nearest-neighbour policy for pairs with none. Sixth, choose an initial phase relationship between the rhythmic rotation and the pitch rotation, and decide whether the PV may retain a CTL across the PC boundary when it conflicts with strict CPS alignment.

When this workflow is applied to the earlier D minor to A minor case, the system performs as intended. The 3/4 bar presents the D minor HI vertically, the AV selects PC a and RC a, the PV selects the same RC and privileges the tone A. The 4/4 bar then presents the A minor HI as an arpeggiation aligned to its Formula, the AV advances to PC b with RC b, and the PV retains a at the onset before resolving to a different tone of the A minor HI at the next WBW position. Across longer spans the listener hears consonant anchors, but those anchors are repeatedly reframed by meter, by rotation, and by the presence or absence of CTLs.

Pitch in this system is mapped directly to

meter through the HI of each MC. The AV articulates that identity locally, introducing passing tones only inside the WBW, while the PV establishes continuity across MCs by privileging CTLs and by resolving gently when none exists. Pitch materials below the chord are organised into PCs that are grouped per class and rotated under a CPS that can be phase-aligned or deliberately offset against rhythmic rotation. The result is a grammar in which consonant chords remain constant in definition but variable in effect, gradually undergoing CD as the composition traverses permutations, cycles, and chains. In this way the system emancipates consonance from the assumption that it will always stabilise time and meaning and instead lets stability and meaning emerge from the interaction of fixed identities with maximal diversity in ordered context.

Conclusions

This study has developed a compositional framework in which meter, rhythm, and pitch are organised through systematic procedures and understood in relation to the phenomenology of listening. It has introduced terminology for these procedures not as a way of separating my practice from the wider discourse of music, but as a way of clarifying and communicating processes that might otherwise remain obscure. It has traced the historical background of the emancipation of consonance, the legacy of temporal disorientation, and the role of spirituality in systematised compositional approaches.

Yet any attempt at closure risks misrepresenting the nature of this project. The system is not a final statement, but a provisional scaffolding. The music it generates is not an answer but an opening. To remain true to this ethos, the most appropriate way to conclude is not to resolve the questions raised but to pose them more sharply, to leave them resonating in the mind of the analyst, the composer, and most importantly, the listener.

What follows are a series of open questions, each of which arises naturally from the inquiry undertaken here. Each question is unfolded into a reflection that resists resolution. These reflections are not conclusions but invitations, designed to keep the discourse alive beyond the boundaries of this thesis.

How much should system determine?

One persistent question concerns the extent to which system should determine compositional outcomes. Systems offer clarity, reproducibility, and discipline. They prevent the composer from becoming lost in arbitrariness and provide a framework in which choices have meaning. Yet what is gained in clarity may also risk becoming constraint.

If every bar is generated by a permutation

or a formula, does the music remain alive to contingency, or does it risk becoming mechanical? Conversely, if the system is relaxed to allow flexibility, does it lose the very rigour that defines it? There is no clear boundary between discipline and freedom, between system and expression. The open question is therefore how far system should be allowed to determine musical material before listening itself is marginalised. At what point does the listener stop hearing the outcome of a process and begin hearing only the process itself? And is this necessarily a problem, or could such exposure of system become a listening experience in its own right?

Can permutation become excess?

Permutation is central to this project. The reordering of small sets of rhythmic or pitch cells ensures variety while preserving identity. Yet there remains a question of excess. How much permutation can a listener meaningfully perceive? At what point does maximal diversity become indistinguishable from randomness?

The cognitive sciences suggest that listeners can track small sets of patterns but become disoriented when variation exceeds their capacity for memory. But perhaps disorientation is itself part of the goal. Is the experience of excess a failure of perception or a provocation to deeper listening?

The open question here is whether permutation is best understood as a tool for recognisable variation or as a means of pushing perception beyond recognition into unfamiliar territory. Both possibilities remain alive, and the balance between them may shift from piece to piece, or even from moment to moment within a work.

What becomes of consonance when it is repeated?

The system deliberately employs consonant sonorities as the Harmonic Identities of each Meter Class. Triads and dyads remain at the core. Yet the effect is not the reassuring stability often associated with consonance. Instead, repetition under systematic variation produces what I have called Consonant Defamiliarisation (CD)
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This raises a deeper question: what happens to consonance when it is repeated to the point of strangeness? Does it lose its stabilising role and become something uncanny? Does it shift from signifying resolution to signifying suspension? Or does it acquire new symbolic resonances, pointing to transcendence precisely because it refuses to settle into functional clarity?

The open question is whether consonance, when emancipated from tonal function, can ever be heard as stable again. Or is its destiny in contemporary practice always to be unsettled, always to hover between the familiar and the strange?

How is pulse experienced in flux?

Pulse is one of the most fundamental aspects of musical perception. In this system, pulse is alternately reinforced, suspended, and reshaped. Sustained Formulae obscure it, divisive Formulae articulate it, the Adjacency Voice unsettles it through rotation, and the Projection Voice anchors it through Common-Tone Links.

The open question is: what is it to experience pulse when it is never consistent? Is the listener left disoriented, or does the fluctuation itself become the new form of stability? Perhaps stability no longer lies in the beat itself but in the awareness of its instability.

This raises further questions about embodiment. Pulse is often experienced physically, through tapping, swaying, or breathing. How does the body respond when pulse is continually destabilised? Does it seek new anchors, or does it learn to inhabit the instability itself?

What role does continuity play across discontinuity?

The Projection Voice privileges Common-Tone Links as ways of sustaining continuity across metric and harmonic boundaries. Yet these links are not always available. Sometimes continuity is sustained, sometimes it is broken.

The open question is how listeners experience continuity across discontinuity. Does a single sustained pitch persuade the ear that coherence remains, even as meter and harmony shift? Or does the persistence of a single tone highlight the fracture, making the discontinuity more acute?

Continuity and discontinuity are not simple opposites. They may be layered and co-present. The listener may experience both the rupture of change and the persistence of similarity simultaneously. The open question is how these contradictory experiences coexist, and whether they lead to disorientation, attentiveness, or even transcendence.

How does system become flexible in practice?

Although this project has emphasised systematic clarity, I have acknowledged that in the act of composition flexibility is inevitable. Sometimes a chord is sustained longer than prescribed because it feels necessary. Sometimes a link is delayed or anticipated to heighten perceptual effect. The open question is how this flexibility should be understood. Is it a failure of the system, or is it the point at which the system becomes fully alive? Perhaps the system is not a closed structure but an open discipline, a scaffolding that makes space for intuition.

If so, how can this flexibility be described, analysed, or theorised? Can the act of listening while composing itself be systematised, or must it remain irreducible? The open question is therefore

how theory and practice interrelate, and whether compositional listening can ever be captured in terminology.

Can spirituality be systematised?
This project has sought to embed spirituality within systematic processes. Yet there is a tension here. Can spirituality ever truly be systematised? Spiritual experience often resists definition, while systems thrive on definition.

The open question is whether system serves spirituality or risks reducing it. Does permutation open space for the sacred, or does it confine the infinite within finite rules? Can silence be embedded in formulae, or is silence precisely what escapes them?

This is not a new dilemma. Messiaen, Pärt, and others have all faced it in different ways. My own work inhabits the tension without resolving it. The open question is whether resolution is even desirable. Perhaps spirituality and system are destined to remain in paradoxical relation, each sharpening the other, each preventing the other from collapsing into banality.

How much should music say?
I have described my own desire both to bear witness to God and to say very little. This dichotomy remains unresolved.
The open question is how much music should say. Should it proclaim, testify, and explain? Or should it remain restrained, silent, and open-ended? When is speech necessary, and when is silence more eloquent?

This is not only a theological question but also an aesthetic one. Listeners come with expectations: some seek guidance, others seek openness. The open question is whether music can satisfy both, or whether it must risk frustrating one to preserve the other.

Why end with questions?
It is deliberate that this conclusion asks more questions than it answers. This choice reflects the ethos of the system and the spirituality that underpins it.
Music in this practice does not dictate meaning but creates conditions for meaning to emerge. To offer definitive answers here would contradict that orientation. Just as the music displaces narrative into the listener's awareness, so too this conclusion displaces resolution into the reader's and listener's own reflection.

The act of questioning mirrors the act of listening. Just as the listener encounters fluctuation, instability, and defamiliarisation, so too the analyst and composer encounter questions that remain unresolved. The refusal of closure is not a weakness but a strength. It respects the autonomy of the listener.

Finally, there is a spiritual dimension to this refusal. Faith itself is often sustained by questions rather than resolved by

answers. To conclude with questions is therefore to affirm that truth is not delivered by the composer but sought by the listener. The music does not impose a doctrine but invites a journey.

Final Thoughts

This project has explored system, perception, consonance, and spirituality through the lens of composition. It has introduced terminology to clarify processes but has resisted presenting those processes as totalising. It has situated itself in historical dialogue but has sought to open new paths.

By concluding with questions, it affirms that the work remains unfinished, open, and provisional. The ultimate significance of the system is not in what it explains but in what it provokes. For the analyst, it provokes new categories of thought. For the composer, it provokes new ways of working. For the listener, it provokes new ways of hearing.

The questions remain because the music itself remains. They point beyond this study to the act of listening itself, where each person must encounter not only the music but also their own truth.