

Texture and Timbre in Dai Fujikura's String Quartet No.2 *Flare* and *A Lonely Person Sitting, Viewing A Flower*, an Original Composition for String Quartet

by

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This study examines the approach to instrumental writing and musical structure in Dai Fujikura's 2010 composition for string quartet, *Flare*. A close reading of Fujikura's own writing on his compositional process indicates three noteworthy areas of concentration. The first is the focus on smaller “phrases” (referred to as “elements” in this study) to form larger “shapes” (which correspond to various textures). The second is the significance of texture variance, driven primarily by changes in timbre, in defining the formal structure of the piece. The third is Fujikura's interest in the tension between opposing dualities, which is manifested in an active-static interchange throughout the piece. In question are the parameters beyond rhythmic density which affect the perception of stasis or activity.

The overview outlines the different textures featured throughout each Part of the piece, identifying texture “blocks”, along with their local and global implications (active or static). Structural analysis reveals references to conventional form, dividing the string quartet into four Parts. In each Part, fundamental musical parameters are analyzed to reveal the primary “elements” and the timbre-based textures they form. The active-static characters are also explored on a micro-level within each Part and in relation to the quartet as a whole. Ultimately, two primary factors impact the perceived implication of motion. The first is the quantity of musical material or events, which affect rhythmic or elemental density. The second is the degree of unity, which is signified most notably by texture, but also by cohesion or regularity.

My original composition, *A Lonely Person Sitting, Viewing A Flower* for string quartet, is based on the poem of the same name by the Taiwanese poet Shiao-Fung Chang. The poem is a tranquil meditation on solitude using the concise syntax of the Chinese language. This string quartet is a musical realization that directly responds to the flow, structure, and sentiments of Chang's poem.

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1.0 Introduction

The music of London-based composer Dai Fujikura (b.1977, Osaka, Japan) is regularly performed by acclaimed ensembles and orchestras around the world. Although his reputation is secure as the most internationally-commissioned Japanese composer of his generation, Fujikura's music has received relatively little scholarly attention. There is limited publication of any kind on his music, mostly in the form of reviews and interviews (refer to bibliography). This analysis is the first substantial analytical study of any of Fujikura's works.

Fujikura's music has been described as "high-octane instrumental writing"¹. This characteristic is embodied in his string quartet *Flare*, written for the Arditti Quartet in 2010. In the program notes, the composer ascribes the inspiration of *Flare* to his childhood fascination with the delicate patterns of a burning campfire². Instead of composing a piece that mimics fire, Fujikura creates an experience that sonically transfers the essence and connotations of burning flames to the audience. One of the most notable moments of *Flare* is the sudden change in texture in its middle Part. After an intense opening (mm. 1–130), Part II (mm. 131–216) abruptly concentrates on a single pitch while dialing up various non-pitched parameters, including rhythm, dynamics, expression marks, and performance techniques. The particular techniques utilized generate unique textures, especially in relation to preceding and following Parts. Additionally, the piece effortlessly

¹ Clements (2006)

² Fujikura (2013)

flows through a diverse array of sonic effects which simultaneously illustrate the subject matter and connect the individual Parts.

Known for his focus on natural phenomena and fondness for cinematic structures, Fujikura constantly seeks fresh approaches to instrumental writing and musical form³. The most revealing insight into his approach to composition is a post written by the composer himself in *The Guardian* to promote a concert featuring his music at the Old Vic Tunnels in London in 2011⁴. In the post, Fujikura expounds on his source of inspiration (nature) and several ways in which he attempts to express this in music. Describing the shape and movement seen in videos of swarming fish and birds, he writes, “I wondered how I could express in music what I saw. How I could control the overall sound, while each individual phrase contributes to the overall shape.” This statement not only reveals the composer’s interest in representing his source of inspiration in music, but also indicates the significance of both the fundamental cell of a “phrase” and the larger “shape” in constructing overarching timbres. Accordingly, this study first identifies smaller sub-phrases, referred to as “elements”, before examining the “shapes” they form, which are related to texture. As will be shown, the fundamental elements develop into related or entirely new elements over the course of the piece. The following chapters also demonstrate how each fundamental element is altered, embellished, and organized to construct particular textures.

The attribution of the larger “shape” to texture is also gleaned from the composer’s own description of his work in the same post. After asserting the relation between phrases and shapes, he writes, “I imagined every line of my music to be like a single fish or bird in a swarm. How they

³ Fujikura (2014)

⁴ Fujikura (2011)

get together, musically how they play in unison, and sometimes how they melt into a big, wide shape is something I can carefully orchestrate.” Here, Fujikura confirms the significance of texture as a focal element in his compositional approach, as well as his careful attention to timbre and structure. To that end, this study analyzes the range of textures presented and how they are used to not only convey contrast and cohesion, but also demarcate the underlying form of the piece.

Conventional Western music typically categorizes texture as either monophonic, polyphonic, homophonic, or heterophonic⁵. In post-war avant-garde music, these definitions were largely expanded, first by Ligeti through the use of micropolyphony⁶, then by Xenakis through the use of granular textures⁷. Building on these approaches, Fujikura explores the protean quality of textures by altering their implication of motion and level of organization. Passages are often distinguished from each other through textural contrast or rhythmic density. Different densities, in turn, imply movement or stillness. Beyond this characterization, some passages feature distinct arrangements of musical material with dense rhythmic activity which nevertheless evoke a sense of inactivity. Furthermore, the level of cohesion is often adjusted to increase the contrast between each texture.

Another salient feature of Fujikura’s music involves opposing dualities. On the process of composing *Frozen Heat* for piano, he writes, “I wanted to write something with a machine-like element, though not completely repetitive... Wild but controlled.” This sort of paradoxical tension is similarly featured in *Flare* and liberally expanded. For example, many polyrhythmic textures in

⁵ Benward and Saker (2003): 137

⁶ Cope (1997): 101

⁷ Roads (1996): 169.

Flare are built on consistent patterns or subdivisions, buttressed and accentuated by fluctuating dynamics, expression marks, and timbres. This contention is further expressed linearly through opposing characters of energized bursts and moments of reprieve, which contribute to the previously described implications of motion—the contrast between activity and stasis. As a result, this study constantly references these qualities on both a micro and macro level. In other words, elements and textures are not merely examined in isolation, but also considered in relation to its encompassing section, Part, or to the piece as a whole.


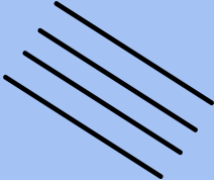


2.0 Overview




Roughly 15 minutes in duration, *Flare* can be broadly divided into four Parts: Part I (mm. 1–130) introduces various musical ideas that define the piece, Part II (mm. 131–216) radically shifts to a unified texture, Part III (mm. 217–276) recapitulates in a contrasting manner, and Part IV (mm. 277–end) winds down in a static coda. Each of the next chapters examines one Part of the quartet, followed by a conclusion. Although musical examples are presented to illustrate specific points, the analysis is intended to be read in conjunction with the score. Timbre and texture are the primary drivers of this work. For this reason, conventional pitch and harmonic analysis are purposely neglected, as they are of little significance in the construction of the piece. Instead, the focus is on how specific approaches to rhythm, articulation, dynamics, and instrumental techniques produce elements and textures which delineate sections and subsections of each Part.

This study first identifies the fundamental units out of which the work is built, primarily in the context of each Part. Over the course of individual Parts, each element is altered and combined to form discrete textures (Table 1). Frequently embellished by articulation, dynamics, and performance techniques, it is the resulting timbres that guide the trajectory of each texture-specific passage. Formal sections are thus clearly demarcated by timbre-based transitions between distinct textures or periods of silence. Often, conventional formal structures are referenced by approximation. This is evident in Part I, where an exposition is emulated by rapid introduction and constant reinforcement of the primary material on which the string quartet is based. Similarly, Part III recapitulates elements from Part I as well as newly developed ones to establish episodes and a refrain, which simulate a kind of rondo. Part IV functions as a coda and is built on six homophonic vacillating chord groups. Unlike these, Part II's unconventional formal structure is defined by two

textures; the former is composed of single-pitch rhythmic polyphony and the latter, varied-pitch homophony.

Table 1. Main texture blocks

Parts	Texture blocks	Characteristics	Timbre	Texture
Part I – Main elements (A and A') (mm. 1–41)	Block 1 	Imitative (timbre)	Extreme timbral contrast	Polyphonic
Part I – Transitions (mm. 42–65)	Block 2 	Imitative (pitch)	No timbral contrast	Polyphonic
Part I – Recapitulation (mm. 66–129)	Block 1 	Imitative (timbre)	Extreme timbral contrast	Polyphonic
Part IIA (mm. 131–173)	Block 3 	Imitative (rhythm, dynamics, and expressions)	No timbral contrast	Polyrhythmic, monophonic (pitch unison)

Part IIB– (mm. 174–216)	Block 2a 	Not imitative	No timbral contrast	Homophonic
III (mm. 217–276)	Block 1 	Imitative	No timbral contrast	Polyphonic
Coda (mm. 277–325)	Transformation of Block 3a 	Not imitative	No timbral contrast	Homophonic

The variety of elements introduced in Part I are formed into mainly polyphonic textures. Each texture is distinguished first by the number of elements utilized—single or multi-element (see 3.0 – Part I, Table 3), then by its polyphonic characteristics—imitative or contrapuntal. Here, “imitative” refers to short, similar patterns combined across several parts, as opposed to the longer “contrapuntal” lines which are rhythmically differentiated. There are homophonic sections as well, though they are brief and often mark the end of a subsection. In Part I, homophony occurs briefly after the closing of the first subsection, and then again at the conclusion of the final subsection. In contrast, the textures of Part II are first a long rhythmically articulated monotone on A and then a homophonic section in a near rhythmic unison. Part III is entirely polyphonic, and its textures are differentiated by their rhythmic density, which in turn imply a character of either active or static. While this active-static binary is prevalent throughout the piece, it is most frequently and consistently presented in this rondo-like Part. The coda (Part IV) is comprised of a persistent

chordal homophony. It is also the least timbrally diverse section of the entire piece, absent of any extended techniques or drastic dynamic changes.

The active-static binary can be conceptualized as an implication of “motion” (see Table 2). Active and static connotations are primarily determined by rhythmic complexity, where density corresponds to activity and sparseness to stasis. However, it can also be that a specific arrangement of musical material with concentrated rhythmic density can evoke a larger sense of stasis. One such example is the first half of Part II, where the polyrhythmic subdivisions craft intricate microstructures which, when performed on the same pitch, cumulatively produce a cohesive texture. When further extrapolated, the active-static division references not merely notions of movement but also the organizational contrast of discord and congruence. In this sense, the profusion of musical elements and embellishing objects in Part I render it highly active, while the meticulous coordination of both pitch and texture in Part II exhibits controlled cohesiveness. Similarly, Part III evinces frantic action by not only resuming the use of a greater number of elements, but also by rapidly alternating textures composed of these elements in sequence. Part IV then ceremoniously closes out the quartet with rhythmically and dynamically cohesive chords.

Table 2. Contour based on implication of motion and general characteristics

Part	I				IIA	IIB	III	IV (Coda)
Measure	1–41	42–59	60–100	101–103	131–173	174–216	217–276	277–325
Texture Blocks								
Duration	1’29”	1’17”	40”	1’28	1’36”	1’55”	3’40”	1’15”
Implication	Active	Static	Active	Static	Static	Active	Alternating	Static

of motion							active / static	
Overall character	Active				Static		Active	Static

On a larger scale, contrast and interruption are often gradually introduced or foreshadowed, while on a micro level, especially within “active” Parts, the shift to the inverse character is abrupt. Indeed, while the primary four Parts follow the active-static dichotomy in alternating order, there is a good long moment of total silence at the end of the active Part I before the more unified Part II. In like manner, the final chord of Part II is sustained at length with a tremolo which simultaneously invokes stasis and implies the impending activity in Part III. Correspondingly, Part III concludes with rhythmically dense and uniform pizz. tremolo chords, anticipating the final homophonic coda of Part IV. Within each Part, especially the active ones, transitions are not so clearly signaled—if there are transitions at all. Parts I and III, for example, shift back and forth from active to static textures through sudden interruptions. Occasionally, transitions are formed by blending micro-elements from the forthcoming texture into the current one. The characteristically static Part II adheres to this pattern of transforming into the next material. The rhythmic subdivision of Part IIB is alluded to in the final measures of Part IIA while it is still confined to a single pitch, seamlessly merging to the more melodic Part IIB from pitch unison to rhythm unison. Lastly, the self-contained Part IV does not incorporate transitions between each phrase; a constant homophony is maintained. However, there are interruptions in the form of dynamic cross-fades, flouting the established pattern and disrupting the predictability of chord-group exchanges.

What are the parameters and related factors determining the perceived sense of stasis or activity? What are the textures that evoke these connotations? What primary elements are they composed of, and what timbres enhance their characteristics? This study aims to answer these

questions through a close reading of the most fundamental of musical elements, the interaction and alignment of such elements, and the many compositional techniques that accentuate their coordination to produce dynamic timbres, which in turn reveal distinguishing, form-defining textures.

3.0 Part I: Building Blocks

One notable aspect of Part I is its sheer abundance of material. The initial focus from the very first subsection is on extreme variety, specifically in terms of rhythm, dynamics and performance techniques. Over time, a consistent contrasting pattern of textures emerges, clearly delineating the structure of Part I. A preliminary discussion is necessary to sketch the characteristics of the opening musical elements, how they are organized, and how they establish the expository nature of Part I. In essence, Part I follows a model of a nonconventional ternary exposition⁸ by simultaneously introducing the fundamental elements of the piece and forging an overarching structural theme of oscillation between activity and stasis. The composer also employs variation, restating the primary elements in various forms. Contrast to variety is created by limiting the number of elements utilized in each texture.

It is thus necessary, as a first step, to examine the primary elements introduced and to identify the kinds of textures derived from them. Part I is roughly divided into three sections (Table 3): Section A (mm.1–59), a transition section (mm.60–79), and a recapitulating Section A' (mm.80–120). The opening statement in section A (mm. 1–23) introduces elements which inform the rest of the section and Part I in general. Several transitional phrases follow (mm. 24–41), leading to a final statement (mm. 42–59). The next section is transitional in nature, comprised of elements derived from the opening statement as well as related new elements. Finally, section A'

⁸ Caplin (2001): 73

recalls the opening statement of section A (mm. 80–100) before settling on its own coda, concluding both section A’ as well as Part I.

Table 3. Formal structure of Part I

Part	Measures	Texture	Primary Elements
Section A – opening statement	1–23	Multi-element contrapuntal (“flare” texture)	1.1–1.7
Section A – continuation	24–41	Single element imitative	1.7
Section A – conclusion	42–49	Single element imitative	1.3
	50–59	Single element homophonic	1.6
Transition	60–65	Two-element imitative	1.8, 1.9, 1.10, 1.11 (Development of 1.2, 1.3, 1.4)
	66–70	Multi-element imitative	1.8, 1.12 (Development of 1.2, 1.4, 1.6a)
	71–76	Multi-element imitative	1.8, 1.9, 1.10, 1.11, 1.12 (Development of 1.2, 1.4, 1.6a)
	77–79	Single element imitative	1.13
Section A’ statement (new tempo)	80–100	Multi-element imitative (Materials from “flare” texture in mm. 1–23)	1.1–1.7
Section A’ – conclusion	101–120	Single element imitative	1.6b
	121–129	Single element homophonic	1.6b
Rest	130	Silence	N/A

3.1 Part I, Section A: Primary Elements

The opening statement of the piece evokes images of flickering flames by juxtaposing seven discrete elements across the four instruments. Each element is initially stated in sequence by violin I in the beginning measures of the piece, labeled as elements 1.1–1.7 (Figure 1). These elements are defined by two primary features: short rhythmic durations and instrumental techniques which frequently divide each element into distinct pairs. Individual notes within each element range are at most one quarter note long. Each element has a “short-long” pairing pattern (Table 4), separated by a rest. Further, with the exception of Elements 1.3 and 1.7, a common attribute is a pizz. directly before a longer arco. Notably, this type of pairing is extrapolated outwards — where Element 1.2 and 1.3 form a larger grouping (see Figure 1). These pizz. to arco pairings are notated with meticulous articulations and dynamics, played in various flavors of pizz. and arco on each subsequent iteration (Table 5). Finally, with the exception of Element 1.1 and its variant Element 1.4, both of which descend a fourth, all other elements have an upward motion in pitch from the first to the second half of the element. As the first seven elements are presented, the other instrumental parts reiterate them in imitation, concurrently reinforcing the significance of said elements and diversifying the texture. Together with the rhythmic and performance variations, this contrapuntal arrangement produces the fulgurating effect of the opening statement.

The image shows a musical score for violin I in 2/4 time, divided into seven elements labeled 1.1 through 1.7. Each element is enclosed in a colored box: 1.1 (red), 1.2 (orange), 1.3 (yellow), 1.4 (green), 1.5 (cyan), 1.6 (blue), and 1.7 (purple). Element 1.1 is marked 'arco pizz. (with vib.)' with dynamics *fff* and *f*. Element 1.2 is marked 'pizz.' with dynamics *f* and *f*. Element 1.3 is marked 'arco (percussive bouncing bow)' with dynamics *f* and *f*. Element 1.4 is marked 'pizz. arco' with dynamics *sfz* and *sfz*. Element 1.5 is marked 'pizz. arco' with dynamics *sfz* and *p*. Element 1.6 is marked 'pizz. trem. arco' with dynamics *mp* and *ff*. Element 1.7 is marked 'molto S.P. arco' with dynamics *mf* and *p*. The score includes various articulations such as accents, slurs, and dynamic hairpins.

Figure 1. Elements 1.1–1.7

Table 4. Technical components of short-long pairings

Short-long pairings	1.1	1.2 and 1.3 (combined)	1.4	1.5	1.6	1.7
Rhythm	✓	✓	✓	✓	✓	✓
Timbre (pizz. + arco)	✓	✓	✓	✓	✓	✗

Table 5. Pizz.-arco pairings

Element	1.1	1.2 and 1.3	1.4	1.5	1.6
pizz.	Regular	Arpeggio	Left hand	Bartok	Tremolo
arco	With vib.	Bouncing bow	Marcato	Bowed tremolo crescendo	Cross-string / two-note tremolos

Element 1.1 is the purest form of the pizz. to arco pairing: the first note starts with a *fff* sixteenth-note pizz., followed by an eighth-note up-bow arco with vibrato. The second note of the pairing begins in a relatively softer *f*, with a crescendo to *ff*. Elements 1.2 and 1.3 combined form a second longer pizz.-arco pairing, as previously noted. On beat two of the first measure, Element 1.2 enters as two upward arpeggiated dyads played within the duration of an eighth note. The first *pizz.* is shorter than the second but has a crescendo starting on *f*. Element 1.3 consists of two descending arpeggio-like sequences of triplet eighths played with a “percussive bouncing bow” (m. 2, violin I). This longer pairing is immediately contrasted with the shortest pairing, Element 1.4, which lasts less than two-thirds of an eighth note. It is also the only pairing where the pizz. and arco notes are of the same short duration; however, the sixteenth triplet rest is perceptually tied to the arco note, which in effect makes the second grouping of Element 1.3 longer than the first. It starts with a *sf* left-hand pizz. and ends on an accented down-bow staccato arco marked

sfz. The fourth pairing (Element 1.5) follows at the end of m. 2 as a sixteenth-note *sfz* Bartók pizz., and, after a brief sixteenth-note rest, lands on a tremolo arco dotted-eighth note that grows from *p* to *ff*. The final pizz.-arco pairing (Element 1.6) is a longer tremolo gesture, with two dyad intervals of sixths to sevenths. The pizz. dotted-eighth note dyad crescendos from *mp* to the *ff* arco dyad. The latter then diminishes to a *p* over the course of its longer quarter-note duration. The final element (Element 1.7) deviates from the previous ones in that it does not employ specific plucking or bowing techniques (mm. 4–5). Additionally, it consists of artificial harmonics. However, the pairing itself is formed by emulating the short-long, pizz.-arco effect of earlier patterns—the first note is a down-bow accented *sfz–mf*, perhaps approximating the effect of a pizz. The second accented up-bow harmonic swells intensely to a *ff*, in contrast to the short attack of the first note.

The placement of Element 1.7 in the opening statement (mm. 1–23) is initially staggered (mm. 3–5, 8–9), then presented in sequence (mm. 10–16) across all four instruments. The beginning statements are closely intertwined with the contrapuntal texture of the other pizz.-arco elements. Subsequent restatements of Element 1.7 distinguish its significance through drastic dynamic fluctuations until the element is suddenly excluded (mm. 19–22). This brief omission gives power to its reoccurrence and substantial extension in the next measures.

This single-element takeover is significant. There are several firsts here. As previously mentioned, Element 1.7 is performed by all instrumental parts, every entry staggered in a controlled and imitative fashion. While the material here is confined, the pitches gradually ascend, mimicking the pitch trajectory of Element 1.7 itself. This upward movement is elevated by expressive glissandi in m. 30, reaching not just the highest non-harmonic pitch thus far, but the first sustained chord (mm. 31–32) in the piece as well. After a brief hold, the pitches descend through a *sul pont.* tremolo back to the earlier staggered artificial harmonics texture. By the second

iteration, some notes of Element 1.7 appear on downbeats instead of the original displacement by sixteenth or eighth notes (m. 24 cello, mm. 26–27 viola, etc.), disturbing any perception of metric regularity. Rhythmically, the downbeat entries are doubled in other parts (m. 37 viola and cello, m. 38 viola and violin I, m. 39 violin I and II) and accelerate the sense of urgency. These changes are emphasized in the same measures (mm. 38–39) in the form of a non-harmonic rendition of Element 1.7.

This increased intensity swiftly connects to a comparable elemental takeover in m. 42, this time by a frantic and percussive texture derived from Element 1.3. The importance of this element is bolstered through imitation, this time with even more uniformity in bowing, accent placement, and dynamic shaping. The only noticeable differentiator between each instrumental part performing the element is in rhythm: notes are of short durations in groups of 3–5, and the rhythm is irregularly displaced by short rests. However, unlike the takeover of Element 1.7 (mm. 24–41) which features differentiating material from the primary element, here Element 1.3 is transmuted seamlessly through rhythmic displacement from a scattered *sul pont.* texture into a more focused and vociferous one (mm. 47–49), where in all four instruments perform in *col legno battuto*—uninterrupted with each note accented. Countering the uniformity in timbre and dynamics, the rhythmic subdivision is intentionally discontinuous (nonuplets in violin I, sextuplets in violin II, septuplets in viola, and regular thirty-second notes in cello), maintaining a percussive polyrhythm which enables a smooth sonic progression to the next and final passage of Section A (mm. 51–59).

While prior passages have featured either multiple elements (mm. 1–23) or a single element (mm. 24–41, 42–49), the texture has remained polyphonic. The final statement (mm. 51–59) is instead conspicuously homophonic. Continuing to feature a single element (Element 1.6), this statement is distinguished by maintaining uniform timbre, dynamics, and texture. Each instrument

performs a dyad that forms a chordal texture which changes concurrently every measure (or two), connected via glissandi. Played forcefully in tremolo pizz. with a plectrum, the long notes are emphasized dynamically (coordinated *pp* crescendo to *fff*). Stagnation is introduced in m. 50 by fermatas, setting up the first major tempo slow-down. This is confirmed immediately in m. 51, where the first tremolo chord is held for 3–4 seconds, and the second for 7–9 seconds. Similarly, the last measure bookends the section with another fermata lasting 8–10 seconds (mm. 59), underscoring its finality.

3.2 Part I, Transition: Developing the Elements

As the plectrum-plucked tremolos fade away, the percussive chords transition to a less uniform, more polyphonic texture. This is achieved through varying the rhythm in four of the primary musical elements (Elements 1.2, 1.3, 1.4, and 1.6a), modified by discrete extended techniques. Three of these four new elements are stated in m. 63, and the fourth in m. 67 (Figure 2).

mm.63		mm.67	
Vn.I pizz. (rapid arpeggio) <i>mp</i> → <i>f</i>	Vn.II norm. pizz.(by RH) sim. <i>p</i> → <i>f</i>	Va. col batt. 5	Vn.II pizz.trem. (gentle trem.) <i>p</i> → <i>mp</i>
Derived from 1.2	Similar to 1.4	Similar to 1.3	Similar to 1.6
Element 1.9	Element 1.10	Element 1.11	Element 1.12

Figure 2. New elements (1.9–1.12) derived from elements 1.2, 1.3, 1.4, and 1.6

The first of the four elements, Element 1.9, is the rapid-arpeggio pizz. dyads with crescendo (violin I, m. 63). Derived from element 1.2, this version extends a two-unit pairing to a three-unit figure. The second, Element 1.10, involves accented thirty-second and sixteenth-note short-long combinations played with alternating left-hand pizz. and normal pizz., derived from Element 1.4 (violin II, m. 63), now expanded to three units from one. The third, Element 1.11, is an accented sixteenth quintuplet (viola, m. 63) related to Element 1.3 by its bowing technique—percussive bouncing bow leading to *col legno battuto*. The fourth, Element 1.12, first introduced in violin II in m. 67, is a gentle pizz. tremolo (with crescendo) which recalls the first portion of Element 1.6. This time, the duration is extended. While these four rhythmic figures differ slightly on each subsequent instance, they are mostly derived from the initial left-hand finger-tapping of the transition section (mm. 60–62), which is a new secondary element (Element 1.8). The first and fourth elements are exceptions to this, extending elements from the opening section instead. The rhythmic material in the second element, for example, is adumbrated in the finger taps played by violins I and II in m. 60 (beat 1, violin I; beat 2, violin II). Likewise, the quintuplet rhythmic pattern of the second *col leg. battuto* element is first outlined in the finger-tapping of violin II in the last beat of m. 60 and viola in m. 61.

Più mosso
♩ = 72

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Figure 3. Element 1.8: left-hand finger tapping, percussive rhythmic figures

These elements are presented in short accented notes with off-beat rests, forming three phrases (mm. 60–65, mm. 66–70, mm. 71–76). The preceding homophonic tremolo passage (mm. 50–60) is connected to the first phrase through these percussion finger-taps. As mentioned, three of the four main musical materials (Elements 1.9, 1.10, 1.11) are presented in all four instruments in m. 63. This short introduction ends on a momentary viola solo of Element 1.11, slowing down over the course of a 3/8 measure in m. 65. The conclusion of this first phrase is notable as it is the first grand pause. The next phrase returns to the earlier tempo, with all four instruments recapitulating the previously introduced three elements, this time adding two more elements—the previously described Element 1.12 (violin II, m. 67), as well as new derivations of Element 1.8 (e.g. cello, m. 67). This mixture of elements briefly continues until another rit. intercedes, this time

over a 3/4 measure in m. 70, similarly ending on a tutti rest. The third and final phrase (mm. 71–76) employs all four elements (1.9, 1.10, 1.11, 1.12) in addition to the finger tapping material (Element. 1.8), leading to a short accelerando which employs the last musical element of this section built on accented dyads, this time played in non-arpeggio pizz. and with a gliss. to the next dyad (see Figure 4, Element 1.13). With the exception of the first group of notes played, each subsequent dyad is embellished with another grace-note pizz. dyad. The duration of the notes is not uniform, and the entries are displaced rhythmically. This offers a change in pace as the passage increases in dynamics and speed from mm. 77–79, leading to a return of the opening materials in m. 80.

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Figure 4. Example of element 1.13, glissando dyads in Part I, transition

3.3 Part I, Section A': Reinforcing Building Blocks

Section A' (mm. 80–130) is clearly recognizable to the listener as a return; it prominently features all seven elements of the opening section in an active polyphonic texture. This time, the

cross-string tremolo (Element 1.6b) is given increasing prominence through exaggerated diminuendo effects evolving into the primary material of the concluding passage of section A' (mm. 101–130). At the outset, the unified material adheres to the single-element imitative treatment from section A (Element 1.7 in mm. 24–41, Element 1.3 in mm. 42–49): staggered entries and rhythmic displacement. This irregularity is highlighted by the shifting focus for each instrumental part performing shared dynamic flares (Figure 5). Slowed significantly, these interrupting dynamic shapes continue to build tension until m. 110, where the pitch range shifts upwards with the assistance of artificial harmonics (cello and viola, m. 110, violins in m. 111).

The image shows a musical score for a string quartet, specifically the 'Flare' movement by Dai Fujikura. It features four staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.). The score is marked with dynamic changes: *pp*, *ff*, *p*, and *f*. The dynamics are shared across the instruments, with each instrument having its own sequence of dynamic changes. The score is numbered 106 at the beginning and 13 at the top right. A note in the cello part at the end of the excerpt says 'harmonic held as a 3rd!'. Below the score, there is a copyright notice: 'String Quartet No. 2: flare by Dai Fujikura © 2010 G. Ricordi & Co. Buehnen- und Musikverlag GmbH – Berlin, Germany. International Copyright Secured. Reproduced by kind permission of Hal Leonard Europe S.r.l. – Italy.'

Figure 5. Example of “shared dynamic flares” in Part I, A’

The next propulsion occurs between mm. 117–119, where the violins and viola shift to *sul pont.* in succession and slowly transition back to regular bowing, until all parts perform the cross-string tremolo figures in rhythmic unison (mm.117–120). Here, the regular dynamic changes also

condense from loud to soft (m. 121). The auditory corollary is a thicker, chord-like effect on each accented *ff* entry, effectively forming a homophonic texture (Figure 6).

The image shows a musical score for a string quartet, specifically Part I, Section A, starting at measure 121. The score is written for four instruments: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The music is characterized by a homophonic texture of chordal thrusts. The score includes several performance instructions: 'molto accel.' at the beginning, 'poco a poco' indicating a gradual increase in tempo, and a specific instruction: 'Increase bow pressure then gradually make the sound even more scratchy by not pressing the left hand fingers properly against the fingerboard'. This instruction is repeated for each instrument part. The dynamic markings range from *ff* (fortissimo) to *p* (piano), with *pff* (pianissimo fortissimo) also appearing. The score is reproduced with permission from Hal Leonard Europe S.r.l. – Italy.

Figure 6. Chord-like homophonic texture in Part I, Section A'

Accentuating the steady chordal thrusts are timbral effects created by specific instrumental techniques. The previous *sul pont.* transition to ordinary bowing (mm. 117–120) is first reversed in mm. 121–123. Performers are instructed to “increase bow pressure then gradually make the sound even more scratchy by not pressing the left-hand fingers properly against the fingerboard” (m. 123). Growing in frequency, the accented entries accelerate through an increasingly hoarse texture until they are “very scratchy” by m. 128. The penultimate measure of Part I (m. 129) embodies the intensifying “flare” of the preceding passage (mm. 121–128). The longest sustained fermata so far in the piece (lasting 12–14 seconds), this measure reverses the established decrescendo pattern, generating an imposing escalation in both dynamics (*pp* to *ffff*) and sonic

quality (ordinary bowing to “very scratchy *molto sul pont*”). Part I concludes with an extended two-beat rest, the longest pure silence of the piece thus far.

The primary elements introduced in Part I form the fundamental building blocks of the entire piece. After an initial contrapuntal statement in section A, three of the seven primary elements (in order, Elements 1.7, 1.3, and 1.6) are isolated and reinforced as thematic ideas. In the transition section, more of the primary elements (Elements 1.2, 1.3, 1.4, 1.6a) are embellished and developed into newer musical material. After a brief peroration of the seven primary elements in section A’, Part I closes with a forceful homophonic texture developed from Element 1.6b.

A significant achievement of Part I is the establishment of an active-passive dichotomy distinguished primarily by textures of meticulously designed timbres and dynamics. While the opening statement of section A (mm. 1–23) features an abundance of musical material in elaborate counterpoint, it is immediately followed by a rhythmically and dynamically sparse texture featuring only Element 1.7 (mm. 24–41). The next single-element passage (mm. 42–50) is rhythmically dense, while the concluding passage (mm. 51–59) is homophonic and much more passive. Similarly, the transition section begins on an active contrapuntal texture featuring multiple elements (mm. 60–76), followed by a more restrained single-element section (mm. 77–79). Part I is, together with its customary expository function, a bold statement of the essential character of the string quartet. In other words, it not only familiarizes the listener with the basic building blocks of the piece, but also creates an expectation, in terms of tension and release, of what is to come.

4.0 Part II – Unity

The beginning of Part II is instantly jarring to the listener. A monotonic unison texture is heard for the very first time. The sudden reduction in pitch material is a massive deviation from Part I that might seem to belong to an entirely different piece. There are two main points of departure: the quantity of musical elements featured and the quality of the textures utilized. First, after introducing elements in Part I that feature a wide array of pitch materials, only a single pitch is utilized in IIA. In addition, while Part I establishes a contrapuntally complex sound world supported by diverse elements, the different types of timbres and textures are replaced with a single one. In IIA, the staggered, polyrhythmic textures are perceived as static due to the confinement to a single pitch, while in IIB, though the pace is more vigorous, the texture is predominantly homophonic and in rhythmic unison. It can be inferred from this drastic character change that a more simplified and passive contrast to the highly active Part I is the centerpiece of Part II. Likewise, the shift from limiting pitch material to limiting rhythmic divergence in IIB implies that unity is another core focus. Consequently, investigating the way in which these compressed musical elements are supplemented (through rhythm, dynamics, expression, and performance techniques) enables a structural analysis in which form is again defined by timbre and texture.

The first section of Part II (IIA), in a radical move to simplicity, is based on a single pitch, A4. The second section (IIB) is a succession of homophonic phrases which develop into a more distorted texture. IIA can be subdivided into four subsections; the first, IIA – a (mm. 131–145), introduces the primary texture. The second is a “Bridge” subsection (146–149), and the third is a continuation of the primary texture of IIA – a (IIA – a’ in mm. 150–168). The final subsection is referred to as the “Conclusion” of IIA (mm. 169–173). IIB introduces the series of homophonic

phrases in its own subsection (IIB – a, mm. 174–198), followed by an intense progression of similar musical materials to the final homophonic tremolo gesture in m. 216 (IIB – b).

Table 6. Formal structure of Part II

Part	Measures	Characteristics	Tempo
IIA – a	131–145	<ul style="list-style-type: none"> • Single note (A4) • Primary texture based on different timbral effects, including <i>ordinario</i> string crossings, <i>sul pont.</i>, accents, vibrato, and harmonics • Primary contrasts: multi-voice contrapuntal vs. either staggered entries or solo <p>Effect: start-and-stop</p>	♩=86
IIA – Bridge	146–149	<ul style="list-style-type: none"> • Longer durations, accelerating over four measures. • Bowing + flared cresc. starts to create pitch differences • Recalls the rhythm of Element 1.7 <p>Effect: reference back to Part I</p>	♩=66
IIA – a'	150–168	<p>Primary texture altered by (one of):</p> <ul style="list-style-type: none"> • Bowing (timbre) change • Multi-beat cresc. or dim. • [No alteration] • Combination of bowing (timbre) change and multi-beat dim. <p>Effect: variation of start-and-stop</p>	♩=82
IIA – Conclusion	169–173	<p>Stacc. rhythmic unison</p> <p>Effect: combined, uniform</p>	♩=102

IIB – a	174–198	<ul style="list-style-type: none"> • Much wider pitch range, not limited to a single note anymore • Homophonic texture, continuing staccato, ascending. • Short notes followed by long notes at tends of phrases <p>Effect: elongated “start-and-stop”</p>	<p>♩=102 Rit.</p> <p>♩=102 Rit.</p>
IIB – b	199–216	<ul style="list-style-type: none"> • Homophony with heavy use of accents; shorter, more staccato • More accents, more percussive, building up tension and intensity. <p>Effect: tension</p>	<p>♩=102 Rit.</p> <p>♩=102 Rit.</p>

4.1 Part IIA: Unity of Pitch

This section is distinguished by its confinement to the single pitch of A4. As such, there is an outsized focus on heightening the effects of other musical elements—rhythm, dynamics, articulation, texture—as much as possible. To the listener, the frequent fluctuations come across as perpetual timbral shifts. The rhythmically displaced attacks not only propel movement, but also create audible secondary harmonics and, due to irregular bow pressure and string crossings, occasional microtonal inflections. Still, even though there are brief periods of solo, staggered entry, and rhythmic polyphony, the majority of the section is built on the manipulation of a single rhythmically constructed primary texture (Figure 7, derived from m. 136).

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Figure 7. Example of primary texture in Part IIa

This primary texture maintains a few consistent characteristics throughout IIA. First, all instruments play the same pitch across two or more strings—the violins and viola alternate between G, D, and A strings (m. 136), while the cello alternates between A and D strings, distinctly holding the A as either a natural harmonic or stopped note (cello, beat 2, m. 136). Second, each instrument maintains the same rhythmic subdivision: violin I in eight thirty-second notes, violin II in septuplet sixteenth, viola in quintuplet sixteenths, and cello in triplet eighths (m. 136). Third, each of the subdivisions is in groups of two, three, four, or five thirty-second or sixteenth notes. These groupings are differentiated either by ties and extended lengths (e.g. four sixteenths in violin I, beats 1–2, m. 134), or by slurs that connect the string crossings (e.g. violin II plays groups of two, three, and four thirty-second notes, in beat 1, m. 136) and extended lengths (e.g. viola in m. 136). Fourth, almost every grouping in the violins and viola starts with an accent. The cello always has tenuto marks on non-harmonic notes, which rarely occur at the beginning of a grouping.

Finally, every pair of the groupings has a corresponding localized pair of hairpin dynamics (cresc. followed by a dim.), often to enhance a larger dynamic change. For instance, violins and viola decrease in volume from *mf* to *pp* over beats 2–4 in m. 137, accentuated by the precise smaller hairpins for every connected note-grouping. As will be shown, this kind of larger dynamic shape plays a more significant role in forming the main texture later on.

The only texture which interrupts the primary one appears briefly in mm. 146–149 (i.e. the “bridge” subsection, Figure 8). Crucially, this texture is distinguished from the primary texture on a rhythmic basis. The notes are longer in duration and syncopated, resembling Element 1.7 from Part I (Figure 9). In particular, the bridge subsection reprises the ascendance of Element 1.7 as the primary material in Part I but adheres to the pitch limitation of Part IIA. Another trait which marks a divergence is the considerable tempo slowdown (quarter note = 66, m. 146), in comparison to the preceding and proceeding sections (quarter note = 86 and 82, respectively).

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Figure 8. Example of interrupting texture in Part IIA

The image shows a musical score for a string quartet, specifically the 'flare' section of 'String Quartet No. 2' by Dai Fujikura. It consists of four staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.). The score is marked with various dynamics and hairpins. Violin I starts with a *ff* dynamic, followed by *sfmf* and *p*. Violin II starts with *p*, followed by *sfmf* and *p*. Viola starts with *p*, followed by *ff* and *sfmf*. Cello starts with *p*, followed by *sfmf* and *p*. The score includes several measures of music with dynamic markings and hairpins indicating volume changes.

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Figure 9. Example of reprisal of element 1.7 from Part I

After this short interruption, the primary texture is reprised with variation. The detailed hairpins are preserved, while the larger scale dynamic changes are eliminated. Furthermore, the hairpins only increase in volume, from *p* to either *ff* or *fff*. All of the *crescendi* played by cello are flared, and only some flared cresc. are in the violins (violin I, beats 2–3 of m. 146, and mm. 148–149; violin II, beat 3, m. 146 to beat 1, m. 147, then alternating between flared and regular hairpins through m. 149) and viola (beats 1–2, m. 147, beat 3, m. 148 to beat 1, mm. 149).

Part IIA features three prominent secondary textures—homophonic, staggered entries, and semi-contrapuntal. These are transitional in nature, and invariably lead to an iteration or reiteration of the primary texture, which is contrapuntal. The first texture change to homophony ensues right after the full measure rest in m. 130, foreshadowing the later rhythmic divisions, intricate hairpins, and string crossings of the primary texture. It is introduced by the viola in m. 131 ending in a rest,

followed by violin II in beats 1–2, interrupted by the cello in beats 2–3 of m. 132. This anticipatory introduction merges to a solo by violin I, which leads to the staggered entry in mm. 134–135. Another solo by violin II is heard in m. 139, before yet another staggered entry. Later on, in m. 140, the staggered entries recur, with the viola leading the entries to another iteration of the primary texture. The most unique change of the three is the semi-contrapuntal texture, which appears only once, in m. 138. Here, note groupings are displaced rhythmically across the four instruments.

Apart from the transitional changes, most of the musical development is achieved through altering the presentation of the primary texture. The two main sources of modification are timbral and dynamic shapes, which are altered to complicate the primary texture's uniform characteristics. Differences in timbre are emphasized through explicit expression and performance directions. The first such marking appears in mm. 134–135 in violins, viola, and cello, where instrumentalists are asked to play with “romantic” vibrato on the D and G strings. The other occurs in the brief interruption in mm. 146–149, where *molto espress. vibrato.* is additionally marked “quasi 19th century romantic music.” Further, contrasting bowing techniques (*sul pont.* and *ordinario*) also affect timbre. This stands out in Part II, which, as opposed to Part I, makes less use of such techniques. One such instance is in mm. 143–144, where the cello carries on in normal bowing while the violins and viola transition from “non-scratchy” *sul pont.* (m.143) to regular arco by the end of m. 144. The same transformation is reversed in mm. 152–153. Finally, it is revisited as a sudden move (“not scratchy” *sul pont.* to *subito normale*) in mm. 154 and 157. Specific performance directions generate a greater degree of accuracy in musical expressiveness. The use of equally descriptive bowing techniques similarly creates a larger range of varying timbres and further permutations of timbral effects.

Aside from transformations in sound, there are also several larger scale (e.g. multi-beat or multi-measure) steady adjustments in volume (see Figure 10). Violin I plays the first instance of a full-measure diminuendo from *mp* to *p* in m. 135, on top of the miniature hairpins marked for each of the groupings of thirty-second and sixteenth notes. Approaching the staggered entry section building up to the primary texture, violin II, viola, and cello each start at *p*, and, joined by violin I in m. 136, increase in volume over mm. 135–136 to *mf* on the first beat of m. 137. Here, in preparation for a solo stint at the end of m. 137, the cello withdraws from the larger-scale dynamic flares, leaving the violins and viola to descend back to *pp* by the end of m. 137. Similarly, after violin II is marked solo in the first two beats of m.139, violin I, viola, and cello crescendo from *pp* to *mp*, then diminuendo back to *pp* over the course of several beats. A more notable multi-measure cresc. from *pp* to *f* starts on the last two beats of m. 140 and continues until the downbeat of m. 143. In an almost immediate response, the same texture becomes more muted from *f* to *pp* from mm. 144–145, where it reaches the “bridge” subsection (mm. 146–149).

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Figure 10. Example of large cresc. in Part IIa

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Figure 11. Example of shorter flared cresc. in Part IIa

These larger dynamic shapes are more specifically used as a propulsive force in IIA – a’ (mm. 150–168) to bolster formal structure. First, the earlier flared *crescendi* from the preceding “bridge” section (mm. 146–149) persist. More notably, there is a shift in isolating timbre-altering effects in IIA – a’. Throughout IIA – a (mm. 131–145), many features are combined to enhance and propel movement of the primary texture. In IIA – a’, the same techniques are utilized separately, concentrating the alteration of the primary texture almost solely to a single effect, or to no particular effect at all. In mm. 150–159, the multi-measure dynamic flares almost always appear in isolation from ancillary effects (e.g. mm. 151, 153, 154, 155–156, 158). These flared *crescendi* are also marked with irregular rhythms, such as the one-and-a-half beat subdivision in mm. 153 and 158, and the two-and-a-half beat subdivision in m. 157 (Figure 11). Similarly, most of the multi-measure timbral changes (e.g. mm. 150–151, 152, 154) occur without larger changes in dynamics. The outlier here is the two-and-a-half beat decrescendo in m. 157, which is played as “not scratchy” *s.p.*, but with an immediate, not gradual, return to ordinary bowing. Finally, there are also passages with no added effects (mm. 154–155, mm. 156, mm. 159). The auditory corollary is an interchange of varying textures, defined by either the presence or absence of a multi-beat dynamic change.

The interchange between passages with and without flared crescendi or diminuendi reaches its acme in m. 158, where the four-beat measure is subdivided into three successive groups of one-and-a-half-beat flared crescendi. After this climactic moment, the duration of these large dynamic shifts is extended considerably, often across multiple measures. Indeed, all instruments begin a multi-measure shift from *pp* (m. 159) to *fff* (m.160), then subside over two measures back to *p* (mm. 161–162). These multi-measure changes are interrupted by three measures of the earlier rotations between passages with and without flared crescendi, before ending on a final, extended multi-measure decrescendo. This time, the length of the dynamic change is greatly expanded, beginning on the last beat of m. 165, persisting not just through IIA – a’ (mm. 165–168), but also through the concluding passage of Part IIA (mm. 169–173). The development of the dynamic shapes from multi-beat to multi-measure to multi-sectional adds variety to the primary texture and provides continuity between discrete subsections of Part IIA.

Similarity in texture also affords a seamless transition from IIA – a’ to the concluding section of IIA (mm. 169–173). In preparation, the primary texture thins out by the end of IIA – a’ (m. 167) until only the viola is left playing fitful quintuplet thirty-second and sixteenth-note groups in a 3/8 measure (m. 168). These sparse and desultory gestures are then linked to the final subsection (mm. 169–173), where all instruments play similarly articulated note groupings, together with sixteenth notes in 4/4 time. This changeover is perceived as uninterrupted due to the metric modulation.

While the transformation is subtle, there are several differentiating features of the concluding subsection. One discernible change is the absence of string crossings or natural harmonics. Another is the shift from sudden sporadic flares at the end of IIA – a’ to a distinct staccato pulse. This creates perhaps the most defining characteristic of the conclusion—the

coordinated rhythmic unison across all instruments. Indeed, the even sixteenth-note subdivision persists despite the irregular accented bowed groupings, ranging between three to five notes. Such regularity is in contrast with the overall shape of the subsection, which is that of a gradual winding-down. The small-scale hairpins are now confined only to diminuendi, while the large-scale attenuation in dynamics from IIA – a’ lingers, unifying the two subsections. These expressions undergird and accentuate the thinning texture from mm. 171–173, concluding the section with a violin II solo at the softest dynamic level (*ppp*) of the piece.

4.2 Part IIB: Unity in Texture

Overall, IIB departs from the pitch confinement of IIA while maintaining other striking features, including homophony. This is achieved through sustaining the beat divisions of strict sixteenths in rhythmic unison, with coordinated expressions and bowings, in addition to synchronized on- and off-beat accents. Even as pitch material and variety of musical elements increase, homophony is strictly maintained. Part IIB thereby preserves commonality with IIA.

On the large level, Part IIB is broadly divided into two subsections (IIB – a, mm. 174–198 and IIB – b, mm. 199–201), differentiated by phrasing and pacing. The former consists of a series of expressive phrases, and the latter an extended build-up to a climactic tremolo (m. 216). The two subsections (IIB – a and IIB – b) are also related by performance techniques as well as musical phrasing. The first connection is in the rapid interchange of bowing techniques. Collectively, all instrumental parts vacillate between short, emphatic notes and smoothly connected ones, where each bowing technique applies to small groups of two to four sixteenth notes (Element 2.1, see Figure 12). This is often interrupted by a more extended period of *sub. marcato* sixteenth notes

(Element 2.2, see Figure 13). In IIB – a, Element 2.1 is prominent in the opening measures (m. 174). The bowing markings begin with *jeté* staccato, followed by a three-note *legato*, a two-note staccato, then legato, and so on. After a longer cluster is held, all instrumental parts feature Element 2.2—nearly two-and-a-half beats worth of *sub. marcato* sixteenths. Next, Element 2.1 swiftly returns, alternating between legato and staccato in beats 2–4 of m. 176. Likewise, IIB – b begins on Element 2.2, an intense accented *sub. marcato* section (mm. 199–200), and proceeds to Element 2.1, the interchange between staccato and legato (mm. 201–202).

The image displays a musical score for four staves, likely representing different instruments in a string quartet. The score is for the piece "String Quartet No. 2: flare" by Dai Fujikura. The page number "23" is visible in the top right corner. The music is written in 4/4 time. Each staff begins with the instruction "jeté (all bouncing bow) for staccato." followed by a series of bowing markings: "legato", "staccato", "legato", and "sim." (simile). Dynamic markings are indicated below the staves: *p* (piano), *mp* (mezzo-piano), *p*, *mf* (mezzo-forte), and *p*. The phrase "exaggerated accents" is written below the first three staves. The score shows a sequence of notes with various articulations and dynamics, illustrating the interchange between staccato and legato bowing techniques.

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Figure 12. Element 2.1

subito marcato legato

sub. *ff* *ff* *sfz* *ff* *mf*

subito marcato legato

sub. *ff* *ff* *sfz* *ff* *mf*

subito marcato legato

sub. *ff* *ff* *sfz* *ff* *mf*

sub. *ff* *ff* *sfz* *ff* *mf*

legato

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Figure 13. Element 2.2

Vln. I *ff*

Vln. II *ff*

Vla. *ff*

Vc. *ff*

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Figure 14. Element 2.3

Contrasting with the short, buoyant Elements 2.1 and 2.2 is Element 2.3, which first appears in m. 194 (Figure 14). Featuring much longer and expressive notes built on syncopated rhythms, this element effectively offers a respite between the preceding fast-paced elements. When first introduced in IIB – a, Element 2.3 is not only longer in duration (two beats in mm. 177–179, two to three beats in mm. 186–187), but also involves a drastic slowdown in tempo (*molto. rit.* in mm. 177–179, 181–183, 186–187, 192, 194, and 198–199). The only development of Element 2.3 occurs in mm. 182–183, where it is followed by a two-beat tremolo dim. from *ff* to *f*, that then swiftly slides down from another tremolo over a flared cresc. back to *ff* (mm. 183). In addition, this element is only alluded to briefly in IIB – b (m. 205).

Another similarity to Part IIA is the use of small rhythmic ideas to build phrases, which are then repeated in shifting duration cycles to fortify an overarching trajectory. The most obvious correlation is with both subsections featuring rhythmic Elements 2.1 and 2.2. Subsection A shifts focus to Element 2.1 (mm. 179–180, mm. 184–185, mm. 188–192, m. 193, and mm. 195–197) after featuring both elements (Element 2.1 in mm. 174–175, Element 2.2 in m. 176), and, as described earlier, lulls the more fast-paced elements with interjections of Element 2.3.

There is some variation on each occurrence, but in general, a phrase in IIB – a comprises Elements 2.1, 2.2, 2.1, then 2.3 (e.g. mm. 174–178, 188–192, and 195–199) or a different ordering, where Element 2.1 is followed by Element 2.3 (mm. 179–181, 184–187, and 193–194). While the sequence of the featured elements may seem mechanically ordered, each phrase contains a high degree of variety. This is evinced not just by the diverse pitch and musical inflections, but also the aforementioned assortment of successive bowing techniques (mm. 172–176), and specific expressive instructions (*molto espress.*) on the prolonged notes of Element 2.3 (mm. 177–178, 181).

By the end of IIB – a, the accentuating instructions are eliminated, trending towards more mechanical execution. Accordingly, IIB – b lacks the phrasing regularity and demonstrative expressivity of IIB – a. After a strictly homophonic opening emphasizing Element 2.2 (mm. 199–200), both Elements 2.1 and 2.2 are equally featured (e.g. Element 2.1 in mm. 201–204, 205, 208–209, Element 2.2 from mm. 210–215). The repetitions of textures built on these elements produces an actuating force as the subsection progresses. The compressed effect is even more pronounced in the final passage featuring only Element 2.1 (mm. 210–216). Here, the cadenced sixteenths push forward without rhythmic gaps, and nearly every note is accented. Additionally, recurrent exaggerated diminuendos accentuate periodicity, producing propelling tension before the final chord of Part II. This tremolo chord (m.216), sustained at the loudest (*ffff*) dynamic marking so far, recalls the sole interruptive musical idea from IIB – a that deviates from Elements 2.1, 2.2, and 2.3 (mm. 182–183) and solidifies a conclusive acme to Part II.

The sudden departure from Part I into the shifting monotonic texture of Part II stuns the listener with its entirely distinct character, as if interjected from an external source. Its divergent quality of a fast-moving passage confined to a single texture is amplified by a radical reduction of first pitch-related, then rhythmic parameters. The perceptual effect is one of elongation, contradicting the preceding Part whose pitch and rhythmic variety produce a sensation of a perpetually rapid passage of time. Notably, both the rhythmic basis in IIA and the pitch variety in IIB reprise elements from Part I. IIA features polyrhythms and syncopation patterns derived from Part I (mm. 46–50 and mm. 24–29 respectively), while IIB has a level of pitch variety similar to the opening statement of Part I (mm. 1–23). Another notable feature is the continuation of the active-passive contrast established in Part I. Part IIA embodies this dichotomy, with several passages of elongated phrases as respite from vividly intense gestures. Part IIB itself vacillates

between similar dynamics, where the shorter, active staccato phrases are followed by brief interruptions (e.g. a held chord in m. 205, an isolated solo in m. 208) which are more passive in nature. Even though the overall characteristics of Part II indicate a function of contrariety, there is, more significantly, an overall projection of consistency and continuity. This refers not just to the consolidated musical material, but of adherence to the overarching theme of the piece itself.

5.0 Part III – Contrast

Unlike the first two Parts of the piece, which progress and sequence through related textures, the third is driven by contrasting ones. The primary musical ideas are short (between 2–4 measures in length) and pointedly alternate between static and active textures. More notably, there is a sustained differentiation between principal material (section IIIA) and recurrent ancillary material (section IIIB). While the changes between textures are abrupt, the concentration on regularity provides stability and direction. On a traditional structural level, these repetitions emulate that of a rondo⁹, where the principal refrain alternates with contrasting episodes (Table 7). Each episode consists of two or three smaller subsections, which are distinguished by their primary musical elements. Though repeated sections are shortened as Part III progresses, they are not otherwise varied or embellished. This formal schema maintains cohesion even as new ideas are introduced, along with occasional flashbacks to earlier ones.

Table 7. Formal structure of Part III

Section	Subsections	Measures	Elements	Motion
IIIA: Initial statement	IIIA – i	217–219	1.7 fast	Active
	IIIA – ii	220–223	1.7 slow	Static
	IIIA – iii	224–226	3.2; recalls 1.3, 1.7	Active
	IIIA – iv	227–229	3.1; recalls 1.3	Static

⁹ Caplin (2001): 231

	IIIA – v	230–234	Recalls 1.6	Static
IIIB: Initial contrast	IIIB – i	235–237.5	–	Active
	IIIB – ii	237.5–242	1.7 very slow, embellished	Static
	IIIB – iii	243–247	1.3, 1.7, 2.2	Active
IIIA’	IIIA – i	248–250	1.7 fast	Active
	IIIA – ii	251–253	1.7 slow	Static
	IIIA – iii	254–256	3.2; recalls 1.3, 1.7	Active
IIIB’	IIIB – i	257–259.25	–	Active
	IIIB – ii	259.25–262	1.7 very slow, embellished	Static
	IIIB – iii	263–265	1.3, 1.7, 2.2	Active
IIIA’’	IIIA – i	266–268	1.7 fast	Active
	IIIA – iii	269–271	3.2; recalls 1.3, 1.7	Active
	IIIA – iv	271–272	3.1; recalls 1.3	Static
	IIIA – v	273–276	Recalls 1.6	Static

As the final portion of the piece before the epilogue (Part IV), Part III lacks a conspicuous summarizing quality; it’s not a simple recapitulation. Only a few select elements (1.3, 1.6, 1.7, and 2.2) from the preceding Parts are featured in each episode. The first two subsections—IIIA – i (mm. 217–219) and IIIA – ii (mm. 220–223)—liberally utilize the syncopated pattern of Element 1.7 (violin I, mm. 4–5) in faster and slower configurations respectively. The former subsection

adds grace notes as well as harsher bowing techniques, while the latter returns to an expressive and smoother timbre. Rapidly descending percussive sequences based on Element 1.3 (Element 3.1, Figure 15) are then featured as the primary element in subsection IIIA – iv (mm. 227–229, 271–272). The two elements from Part I (1.3 and 1.7) are subsequently blended into Element 3.2 (Figure 16) in subsection IIIA – iii (mm. 224–226, 254–256, 269–271). Displaced across the instruments, this development preserves the ascending direction of pitch from Element 1.7. The second (higher) note is held longer in anticipation of the percussive downward sequence derived from Element 1.3. The ensuing subsection IIIA – v (mm. 230–234, 273–276), comprised primarily of pizz. tremolo dyads ranging from seconds to sevenths, also recalls the first half of Element 1.6. In this version the dyads are held much longer—often two beats more. Finally, in subsection IIIB – iii (mm. 243–247, 263–265), elements 1.3 and 1.7 are integrated with shorter accented note-groups (e.g. violin and cello in the second half of mm. 247) which recall Element 2.2. In general, while the selection of reprised elements evinces a recurring quality, the distinguishing characters of each episode gives them a contrasting role rather than a resemblance to or review of earlier passages.

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Figure 15. Element 3.1

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Figure 16. Element 3.2

Nonetheless Part III has the quality of a recapitulation in that it brings back the contrapuntal treatment of Part I. More subtly, Part III embodies the contrasting qualities of Part I and Part II; Part I briskly introduces an active series of musical ideas with broad-ranging textures, while Part II retains a radically quiescent character of homogeneity in pitch, texture, and principal material. The confrontation of these two opposites is manifested in Part III as a periodic dialectic between stasis and movement. Part III begins with rapidly changing materials in subsection IIIA – i (mm. 217–219), which coincides with the climactic moment of the piece. This is a direct culmination of tension built up from the preceding section of Part II (mm. 199–216). With vivid emphasis (starting on *ff*, marked “super” *marcato* and *molto sul pont.*), the primary gesture (developed from Element 1.7) is built on syncopated sixteenths tied to eighths. Each note is preceded by an accented grace note, furthering the frenetic pace. The quality of movement continues through the end of subsection IIIA – ii (mm. 220–223), through sudden shifts in timbre (ordinary bowing played *molto espress.*), attention to dynamic detail (*p* surging to *f* then receding every two beats or so), and highlighted tempo change (*molto rit.* over mm. 221–223). These details maintain the quality of movement even when the overall expression is marginally subdued.

Rather than acting as a response of equal prominence, the static episodes of Part III frequently function as either transitions between or resolutions to their complementary active gestures. The first example of a transitional subsection perceived as a respite is subsection IIIA – iii, where the passive material is derived from its preceding section. Here, the development on Element 1.7 is extended so that the second and higher note is held for at least a beat or longer (e.g. beats 3–4 of mm. 224 to beat 1 of mm. 225, violin II), producing a delaying effect. Short spurts of brisk movement (recalling Element 1.3) interject, before transforming into the next subsection consisting entirely of active movement (IIIA – iv, Element 3.1). An example of a resolution passage with similar stillness is the *pizz. tremolo* in subsection IIIA – v (mm. 230–234). These prolonged dyads, while accented, are entirely in *mp*, a direct inverse of the hastily fluctuating dynamics of prior subsections.

In the manner of section IIIA, section IIIB vacillates between movement and passivity. After the idle subsection IIIA – v, a busy contrasting texture is manifested as an irregular series of short pitches with exaggerated *crescendi* in IIIB – i (mm. 235–237). This animated quality is intensified by concurrently juxtaposing four different types of rhythmic figures in a staggered fashion. All instruments perform on off-beats (often syncopated by thirty-second or sixteenth rests) in a polyrhythmic texture—cello in septuplet eighths, viola in quintuplet eighths, violin II in triplet eighths, and violin I in regular eighths. Each note is locked into its own rhythmic configuration, but every entry is unexpected due to the collocation of diverging subdivisions. This is quickly followed by the passive subsection IIIB – ii, where the connected upward movement of Element 3.2 from subsection IIIA – iii is drawn out and embellished through sliding *port.* (mm. 237–242). Throughout the passage only three notes are emphasized—an accent on beat 2 of m. 241 in violin II, an accented tenuto on beat 3 of m. 241 in the cello, and a final accent on the last beat of m. 242,

also in the cello. Longer note values with less frequent rhythmic interruptions, along with rare accents, concurrently cultivate an inertia which camouflages this passage's transitional quality: the development of Element 3.2 (and its inverse movement as a secondary focus) in IIIB – iii.

The measured long gestures of IIIB – ii are interrupted in m. 243 by the hasty contrapuntal texture of IIIB – iii. In terms of material, the summation aspect of Part III dominates: a much shorter variant of Element 3.2 appears in beats 3–4 of m. 243 in cello, while the reverse modification of Element 3.2 appears in beats 3–4 of violin II, in the same measure. Other qualities also contribute to the increase in movement. For example, dynamic changes occur more frequently and in a much shorter period of time. Additionally, the shorter note groups are amplified with accented *marcato* (e.g. violin and cello in the second half of m. 247), which is a development on Element 2.2 from Part II (mm. 175–176). Leaps of large intervals with syncopated (e.g. beat 1 of m. 244, cello) and dotted rhythms (e.g. beats 2 and 4 of m. 244, violin I) also characterize a longer phrase. Collectively, the disjointed distribution of notes over frequently changing rhythmic patterns, the oscillation between short accented notes and slurred longer and shorter notes, and the circuits of dynamic transitions typify this episode (mm. 243–247) not only as the most engaged and active, but also as the most diverse utilization of musical material within Part III. More significantly, this passage coalesces the winnowed musical ideas from Part I and Part II. Specifically, the development of Element 3.2 utilizes Elements 1.3 and 1.7, while the accented *marcato* interruptions recall Element 2.2.

The culmination of the gradual build-up in section IIIB is the return to subsection IIIA – i, which marked the climax of the piece during its first occurrence. This is followed by a quick restatement of subsections IIIA – ii and iii (omitting IIIA – iv and v), before another iteration of subsections IIIB – i, ii, and iii. These renditions, especially of the passages from section IIIB, are

notably truncated in comparison to their initial statements. For example, subsection IIIB – i lasts a little over two measures (m. 257 to beat 1 of m. 259) rather than roughly three (m. 235 to beat 1 of m. 238) in its first appearance. Similarly, IIIB – ii only lasts for four measures (mm. 259–262) as opposed to five (mm. 238–242), while IIIB – iii takes place over three measures (mm. 263–265) rather than five (mm. 243–247). The shortened versions of earlier episodes not only heighten the contrast between movement and idleness, but also accrue momentum leading towards the swift final reprise of IIIA, where IIIA – ii (mm. 266–271) is conspicuously omitted. After a terse statement of IIIA – iv (mm. 274), Part III settles on a truncated reiteration of the tranquil pizz. tremolo subsection IIIA – v (mm. 273–276). To emphasize the impending resolution, all dyads are performed homophonically and held longer in both mm. 273 and 274. Decisively, the final chord of Part III is held over two measures, with the last measure marked to last 8 – 9 seconds. This not only resolves all of Part III in repose, but also augurs the unified homophony of the final coda of the piece, Part IV (mm. 277–end).

Although the principal and contrasting themes do not explicitly recall passages from Parts I and II, the usage of and development of some earlier musical elements (i.e. 1.3, 1.6, 1.7, and 2.2) gives Part III the quality of a recapitulation employing contrast. Contrast is manifested in two distinct ways—first, the fluctuation between movement and stillness evokes the initial distinction between the varying ideas of Part I and the condensed unity of Part II; second, the rondo-esque formal juxtaposition of a principal refrain with cyclical auxiliary digressions bolsters the theme of contrast. This formal configuration also condenses episodes as they recrudescence, abridged either through section length-reduction or selective omission. This very escalation leads to perhaps the most static Part of the entire piece—a coda section (mm. 277–end) formed exclusively of chords, an apposite final contradiction to a Part characterized by contrast.

6.0 Part IV – Coda (Flare)

As the conclusion to the string quartet, Part IV is noticeably compact in length, pitch selection, and range of dynamic expressions. The entire Part (mm. 277 – end) contains a series of only six homophonic chord groups. This continues the piece's overall trajectory of oscillation between activity and passivity, where parts I and III are dynamic overall and parts II and IV are relatively static. Very little material is developed from earlier Parts of the piece. Some precedents include the sonorous quality of the chords (in contrast to the cacophonous Part III) formed of intervals foreshadowed in Part IIB (e.g. lengthened chords in mm. 178–179, m. 181, mm. 185–187, and m. 194), and the meticulous dynamic changes pervasive throughout the entire piece. As such, the self-contained passage serves as a stand-alone coda, with accentuating techniques complementing the condensed primary material to generate a conclusive static texture.

Like the transition from Part I to II, the shift from Part III to IV considerably reduces the diversity of pitches. Although the total chromatic range is present, there are only six eight-note chord groups formed of dyads across the four instruments (Table 8). Chord changes are driven by a progressive elevation in pitch; there is no overlap between most of them. The sole exception exists in the first two introductory chords, where the top three dyads sustain and the bass (cello) notes change. Furthermore, sudden dynamic swells occur every other measure. This effectively emphasizes the dyads in violin II and cello, followed by their complement within the chord group, performed by violin I and viola. Such predictable interchange effectively bifurcates each eight-note group into two audibly distinct four-note chords (Figure 17).

Table 8. Formal structure of Part IV

Chord group	4.1	4.2 (extends 4.1)	4.3	4.4	4.5	4.6
Measures	277–282	283–290	291–297	298–304	305–312	313–325 (end)

The musical score in Figure 17 illustrates the chord sequence in Part IV, organized into six distinct sections. Each section is represented by a grand staff (treble and bass clefs) with vertical dashed lines indicating the boundaries between sections. The sections are labeled with their respective measure ranges: 277-282, 283-290, 291-297, 298-304, 305-312, and 313-325. The chords progress from lower registers in the earlier sections to higher registers in the later sections, showing a clear upward trajectory in pitch.

Figure 17. Chord sequence in Part IV

While the swells sound abrupt, there is nevertheless a sense of regularity throughout Part IV. Most prominently, the chords continue to climb in register, generating a broadening quality. Along with this rise in pitch, each tetrachord steadily fluctuates between low to high register (with the exception of mm. 298–304), in keeping with the global trajectory of ascent. Not only does the dynamic interchange alternate with regularity every other measure, the large-scale range in volume remains fairly static throughout the entire Part: the receding voices always drop to *pp*, while those brought to the fore never exceed *f*. Additionally, stressed chord-notes are consistently emphasized by accents and tenutos before dissipating into the background, giving room to their complement ascending to prominence. These weighted articulations reinforce the constancy of each featured chord, as the listener anticipates the next chord happening at the same intensity.

Conspicuously, the periodic expectation is only broken in the final measure of the piece, where the emphasized lower chord in *mp* melds with its complement chord in *p*, surging in one final “flare” to *ff*. However, other aberrations interfere with the measured periodicity of Part IV. One salient feature is the time signature changes, which range from uniform (e.g. 3/8 in chord group 4.5, mm. 305–312), predictably recurring (e.g. 2/4 to 3/4 in chord group 4.3, mm. 291–297; 3/8 to 3/4 in chord group 4.6, mm. 313–end), to unexpected (e.g. 5/8, 2/8, 2/4, then back to 5/8 in chord 4.2, mm. 283–290). Similarly, after establishing a systematic oscillation from lower- to higher-register chords in chord groups 4.1 through 4.3, chord group 4.4 defies expectations by initializing on the higher pitched chord instead (m. 298, emphasis on violin I and viola). These characteristics—variation in duration and intentional pattern breaking—in conjunction with the organized flared crescendos escalating towards each highlighted chord, generate sudden surges in volume and intensity, thereby producing consistent and harsh tension over an ever-expanding texture.

As in Part II, the drastic simplification of parameters in Part IV provides a return to comparative idleness, completing the theme of contrast from Part III. It also resolves the string quartet’s overarching interchange of activity and stasis. While Part III features ample musical elements and rapid vacillation between passages of disparate characteristics, there is a dramatic reduction in pitch material, rhythmic density, and dynamic variance in Part IV. As in Part II, this significant constraint produces a sense of unity and stagnation. Though some irregularity exists in dynamic expressions, envelope shifts, and rhythmic divisions, the circumscribed pitch material and dynamic patterns are synchronized in a recurring and predictable manner. Likewise, there is a consistent ascent of each chord group in pitch, ultimately concluding on a final protracted

amplification at the coda's peak register. Consequently, stasis is maintained by both the sparseness of musical events and the cohesion of textural homophony, gestural regularity, and pitch trajectory.

7.0 Conclusion

While each Part of the string quartet presents a different approach to organizing timbre and texture, an overarching continuity unifies the complete work so that it is perceived as portraying various aspects of the subject matter, “flare”. The musical materials throughout the piece, though functionally distinct, are often related to or build on primary source elements. On a macro level, a clear oscillation between active and static characters persists through the piece, balancing out the varying formal structures and thematic focus of each Part. As this analysis has demonstrated, each Part features its own developmental process which in turn shapes the formal structure. Indeed, Part I follows a conventional expository format, introducing primary elements and highlighting their influence through development, whereas Part II is structured around the notion of unifying the overall Part when materials are greatly reduced. Part III presents a rondo-esque scheme, while Part IV adheres to a more traditional epilogue.

It is therefore crucial to not focus solely on single elements or textures, but to examine them in context of each Part, and in relation to the work as a whole. Conversely, there are significant fluctuations in timbre and texture which clearly delineate each Part. The conflict between discrete processes of material development solidifies the formal structure. In Part I, the significance of the primary elements is reinforced by focusing on either one or multiple elements within a texture, and by alternating between juxtaposed contrapuntal phrases and purely imitative repetitions. Part IIA heightens every musical aspect other than pitch, which is limited to only one note, while Part IIB builds on ideas from Part I to develop new musical elements which guide the ebbs and flows of its homophonic texture. Part III further develops emphasized material from Part I and introduces its own new elements to distinguish each episode and refrain. Subsequently, Part

IV, in a return to simplicity, settles on a homophonic texture built on the fundamental elements of six two-part chord groups.

Finally, the dynamic variability of timbre and texture throughout the piece presents cyclical contrast, though not always in precise opposition. This disparity broadly falls under opposing categories of implied movement. On a high level, Part I, with an abundance of musical elements, and Part III, featuring continuous contrast, can be viewed as active. On the other hand, Part II and IV, featuring radically constrained musical material and highly unified textures, are perceived as more static. A similar vacillation exists between the two inverses within each Part, and subsequently within each section of each Part. In other words, there is a sense of continual divergence from the preceding section, where some such changes are abrupt, while others are seamless. This affirms the role of timbre and texture in actuating transformation throughout the piece. Furthermore, it solidifies the active-static dichotomy as the driving force and defining characteristic of the quartet.

Appendix A *A Lonely Person Sitting, Viewing a Flower* for String Quartet

Notes

A Lonely Person, Sitting, Viewing A Flower was inspired by a poem of the Taiwanese female poet Shiao-Fung Chang, which uses tongue-in-cheek wordplay to explore deeper meanings behind succinct material. The original poem is as follows:

寂寞的花，坐著，看人。
人，坐著，看花的寂寞。
花，看人的：坐著、寂寞。
坐著，看花人的寂寞。
花坐，看著寂寞的人。
寂寞的坐著，看花人。
看花，坐著寂寞的人。
人——花，坐看著：寂寞。

In this poem, Chang harnesses the concise syntax of the Chinese language to paint a tranquil portrait of solitude. The entire poem makes use of only eight characters, which roughly translate to the English words “lonesome,” “man,” “sitting,” “viewing,” and “flower.” By displacing these characters through strategic ordering and punctuation, the essence and implications of each character are gradually challenged and reflected upon. Using wordplay, Chang goes beyond a simple portrait of “a person sitting alone, viewing a flower” to explore the relationship between the objects (the person and the flower), the sedentary act of sitting, each object’s state of being, the implications of solitude, and finally, the concept of loneliness itself.

My piece directly responds to the flow, structure, and sentiments of Chang’s poem. Notions of solitude and space are explored through the use of limited musical vocabulary to shape sparse thematic material.

A Lonely Person, Sitting, Viewing a Flower
I.

Lu-Han LI

♩=72
sul tasto

Violin I
p

Violin II
p

Viola
p

Violoncello
f *mp* *f*

(natural harmonics)

5

mp

mp

mp

mp

sul pont.

sul tasto

7

p *mp*

p *mp*

p *mp*

mp

ord.

sul pont.

ord.

11

Musical score for measures 11-14. The score consists of four staves. The top staff has a treble clef and contains a triplet of eighth notes in measure 11, followed by a half note in measure 12, and a triplet of eighth notes in measure 13. The second staff has a treble clef and contains a half note in measure 11, followed by a half note in measure 12, and a triplet of eighth notes in measure 13. The third staff has a bass clef and contains a half note in measure 11, followed by a half note in measure 12, and a triplet of eighth notes in measure 13. The bottom staff has a treble clef and contains a half note in measure 11, followed by a half note in measure 12, and a triplet of eighth notes in measure 13. Dynamics include *mf*, *ff*, and *mf*. There are also *mf* markings in the second and third staves.

15

Musical score for measures 15-18. The score consists of four staves. The top staff has a treble clef and contains a half note in measure 15, followed by a half note in measure 16, and a triplet of eighth notes in measure 17. The second staff has a treble clef and contains a half note in measure 15, followed by a half note in measure 16, and a triplet of eighth notes in measure 17. The third staff has a bass clef and contains a half note in measure 15, followed by a half note in measure 16, and a triplet of eighth notes in measure 17. The bottom staff has a treble clef and contains a half note in measure 15, followed by a half note in measure 16, and a triplet of eighth notes in measure 17. Dynamics include *mf* and *f*.

19

Musical score for measures 19-22. The score consists of four staves. The top staff has a treble clef and contains a triplet of eighth notes in measure 19, followed by a half note in measure 20, and a triplet of eighth notes in measure 21. The second staff has a treble clef and contains a half note in measure 19, followed by a half note in measure 20, and a triplet of eighth notes in measure 21. The third staff has a bass clef and contains a half note in measure 19, followed by a half note in measure 20, and a triplet of eighth notes in measure 21. The bottom staff has a bass clef and contains a half note in measure 19, followed by a half note in measure 20, and a triplet of eighth notes in measure 21. Dynamics include *f* and *f*. There is a *pizz.* marking in the top staff in measure 21 and a *knock on wood* marking in the bottom staff in measure 19.

21

tap on wood

pizz.

arco

mp

tap on wood

pizz.

arco

pizz.

ff

knock on wood

f

ff

25

arco

f

pizz.

tap on wood

arco

ff

pizz.

arco

f

p

ff

arco

f

7

arco

mp

29

fff

fff

fff

fff

32

pizz. arco
3 3 mp
pizz. arco
3 mp
pizz. arco
3 5 mp
mf

35

pizz. arco pizz. arco pizz.
sf f f
pizz. arco pizz. arco pizz.
sf f f
pizz. arco pizz. arco pizz. arco
sf f f f
arco
f ff 3

38

arco 3 ff
arco 6 ff pizz.
3 mp cresc.

40

3 6 arco 6 6

43

sul tasto

ff

sul tasto

ff

sul tasto

ff

sul pont.

fff

47

sul pont.

f

54 sul tasto

mf 3

fff 3

pizz.

mf

fff

sul tasto

mf 3

fff

pizz.

ff

arco

sul pont.

fff

57

f

mp

pizz.

f

mp

f

mp

sul pont.

f

mf

mp

sul pont.

61 arco pizz.

arco pizz.

arco pizz.

pizz.

pizz.

65 arco

Musical score for measures 65-71. The score is written for four staves: Treble 1, Treble 2, Bass 1, and Bass 2. Measure 65 starts with a treble clef and a key signature of one flat. The music features a mix of eighth and quarter notes in the upper staves, and a bass line with eighth notes and rests. A fermata is placed over the first note of measure 65. The word "arco" is written above the first staff in measure 65. The piece concludes with a double bar line at the end of measure 71.

72

Musical score for measures 72-75. The score is written for four staves: Treble 1, Treble 2, Bass 1, and Bass 2. Measures 72 and 73 are mostly empty staves with rests. In measure 74, the Bass 1 staff contains a long, sustained note with a fermata. The piece concludes with a double bar line at the end of measure 75.

II.

♩ = 52

Musical score for measures 1-2. The score is for Violin I, Violin II, Viola, and Violoncello. The tempo is marked as ♩ = 52. The Violin I part is marked "sul tasto 5" and features a sequence of notes with dynamic markings *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*. The Violin II part is marked "sul tasto 6" and features a sequence of notes with dynamic markings *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >. The Viola part is marked "pizz." and features a sequence of notes with dynamic markings *mp*, *p*. The Violoncello part is marked "sul tasto" and features a sequence of notes with dynamic markings *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*.

Musical score for measures 3-4. The score is for Violin I, Violin II, Viola, and Violoncello. The Violin I part is marked "sul tasto 5" and features a sequence of notes with dynamic markings *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*. The Violin II part is marked "sul tasto 6" and features a sequence of notes with dynamic markings *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >, *pp* < *p* >. The Viola part is marked "pizz." and features a sequence of notes with dynamic markings *mp*, *p*. The Violoncello part is marked "sul tasto" and features a sequence of notes with dynamic markings *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*, *pp*, *p*.

Musical score for measures 5-6. The score is for Violin I, Violin II, Viola, and Violoncello. The Violin I part is marked "sul tasto 5" and features a sequence of notes with dynamic markings *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*. The Violin II part is marked "sul tasto 6" and features a sequence of notes with dynamic markings *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*. The Viola part is marked "pizz." and features a sequence of notes with dynamic markings *mp*, *mf*, *mp*, *mf*, *mp*, *mf*. The Violoncello part is marked "sul tasto" and features a sequence of notes with dynamic markings *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*, *mp*, *p*.

7 -----sul pont. sul tasto -----sul pont. sul tasto -----sul pont. sul tasto -----sul pont. sul tasto -----

-----sul tasto sul tasto -----sul pont. sul pont. -----sul tasto ord.

mp p mp p mp p mp p

p mp p mp

mp mf mp mf mp mf

mf

mp

mp p mp

9 ----- sul pont. sul tasto -----sul pont. ord.

mp p mp

p mp

mf mp mf mp

mp mf mp

p pp

mp pp

11

p mp p p mp p

mp p < mp > p < mp > p

mf p

mp p

13

Violin I: *mp*, *p*, *mp*, *p*, *mp* (5)
 Violin II: *mp* (3), *pizz.* (3), *mp*, *arco*
 Violoncello: *mp* (3), *pizz.* (3), *arco* (3)
 Bass: *mp* (3), *pizz.* (3), *arco* (3)

15

(machine-like) 5 *p*
 (machine-like) 6 *p*
 (machine-like) *mp* (3)
 (machine-like) *p* (7)

16

5 *p*
 6 *p*
 3 *mp*
 7 *p*

Musical score system 17-18. It consists of four staves: two treble clefs (top two) and two bass clefs (bottom two). The top staff has a treble clef and contains eighth-note runs with fingering 5. The second staff has a treble clef and contains eighth-note runs with fingering 6. The third staff has a bass clef and contains eighth-note runs with fingering 3, with the instruction "pizz." above it. The bottom staff has a bass clef and contains a dense sixteenth-note accompaniment with fingering 7. The system is divided into two measures.

Musical score system 19-20. It consists of four staves: two treble clefs (top two) and two bass clefs (bottom two). The top staff has a treble clef and contains eighth-note runs with fingering 5. The second staff has a treble clef and contains eighth-note runs with fingering 6. The third staff has a bass clef and contains eighth-note runs with fingering 3. The bottom staff has a bass clef and contains a dense sixteenth-note accompaniment with fingering 7. The system is divided into two measures.

Musical score system 21-22. It consists of four staves: two treble clefs (top two) and two bass clefs (bottom two). The top staff has a treble clef and contains eighth-note runs with fingering 5 and accents. The second staff has a treble clef and contains eighth-note runs with fingering 6 and accents. The third staff has a bass clef and contains eighth-note runs with fingering 3 and accents. The bottom staff has a bass clef and contains a dense sixteenth-note accompaniment with fingering 7. The system is divided into two measures.

23

mf

25

pizz. *f* *mf* *mf* *mf*

p *mp* *mf* *mf*

f *pizz. arco mp f* *sul pont. arco mf 7 f* *mf 5 f*

p < f *ff* *p < f* *mf*

29

p *f* *p* *mf*

mf *f* *mf* *f*

32

Musical score for measures 32-33. The score is in 3/4 time and features a complex rhythmic pattern with triplets and slurs. The upper staves (treble clef) have a melodic line with slurs and triplets. The lower staves (bass clef) have a bass line with slurs and triplets.

34

Musical score for measures 34-36. The score is in 3/4 time. Measure 34 has a melodic line with a slur and a triplet. Measure 35 has a melodic line with a slur and a triplet, and a bass line with a slur and a triplet. Measure 36 has a melodic line with a slur and a triplet, and a bass line with a slur and a triplet. The score includes dynamic markings (*mf*, *mp*) and articulation markings (*pizz.*, *arco*).

39

Musical score for measures 39-40. The score is in 3/4 time. Measure 39 has a melodic line with a slur and a triplet, and a bass line with a slur and a triplet. Measure 40 has a melodic line with a slur and a triplet, and a bass line with a slur and a triplet. The score includes dynamic markings (*rit.*) and articulation markings (*arco*, *pizz.*).

(keep the harmonics)

gliss.

rit.

(keep the harmonics)

gliss.

rit.

A Tempo

arco
sul tasto---sul pont. sul pont. pizz.

pizz. **A Tempo** pizz. pizz. sul tasto---sul pont. arco

gliss. **A Tempo** arco sul tasto---sul pont. **mf** 3

gliss. pizz. arco sul tasto---sul pont. **mf** 3

mp **p** **f**

f arco arco arco

arco sul tasto --- sul pont. **mp** pizz. arco

pizz. **mf** **p** **f** **mf** **f** **mf**

pizz. pizz. arco arco 5

pizz. **mp** **f** **ff** **mp**

f **p** **mp** **f**

48 pizz. arco 5

arco **p** pizz. arco

p **f** **f** **f**

pizz. arco

mf **f** **f** 7 7

f 3

50

50

arco

f *ff* *p*

f *ff*

pizz. arco pizz.

f *ff* *mp*

pizz. *mp*

Detailed description: This system contains measures 50 through 53. It features four staves: two treble clefs, one alto clef, and one bass clef. Measure 50 starts with a treble clef staff containing a triplet of eighth notes, followed by a half note, and then a half note with a slur. The second treble clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The alto clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The bass clef staff has a half note, a half note, and a half note with a slur. Dynamics include *f*, *ff*, *p*, and *mp*. Performance instructions include *arco*, *pizz.*, and *mp*. There are also slurs and accents throughout.

51

51

mp *mf*

mp *mf*

mp *mf*

Detailed description: This system contains measures 51 through 53. It features four staves: two treble clefs, one alto clef, and one bass clef. Measure 51 starts with a treble clef staff containing a triplet of eighth notes, followed by a half note, and then a half note with a slur. The second treble clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The alto clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The bass clef staff has a triplet of eighth notes, a half note, and a half note with a slur. Dynamics include *mp* and *mf*. There are slurs and accents throughout.

54

54

Detailed description: This system contains measures 54 through 56. It features four staves: two treble clefs, one alto clef, and one bass clef. Measure 54 starts with a treble clef staff containing a triplet of eighth notes, followed by a half note, and then a half note with a slur. The second treble clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The alto clef staff has a triplet of eighth notes, a half note, and a half note with a slur. The bass clef staff has a triplet of eighth notes, a half note, and a half note with a slur. There are slurs and accents throughout.

57

Musical score for measures 57-61. The score is written for four staves: two treble clefs (violin and viola) and two bass clefs (cello and double bass). The key signature has one flat (B-flat). Measure 57 features a long melodic line in the first treble staff with a slur and a fermata. The second treble staff has a similar line with a slur and a fermata. The cello and double bass parts play a rhythmic pattern of eighth notes with triplets. Measure 58 continues the melodic lines with slurs and triplets. Measure 59 has a similar melodic structure. Measure 60 features a more complex melodic line in the first treble staff with a slur and a fermata. Measure 61 concludes the system with a final melodic line in the first treble staff.

58

Musical score for measures 62-66. The score continues from the previous system. Measure 62 features a melodic line in the first treble staff with a slur and a fermata. The second treble staff has a similar line with a slur and a fermata. The cello and double bass parts play a rhythmic pattern of eighth notes with triplets. Measure 63 continues the melodic lines with slurs and triplets. Measure 64 has a similar melodic structure. Measure 65 features a more complex melodic line in the first treble staff with a slur and a fermata. Measure 66 concludes the system with a final melodic line in the first treble staff.

62

Musical score for measures 67-71. The score continues from the previous system. Measure 67 features a melodic line in the first treble staff with a slur and a fermata, marked *pp*. The second treble staff has a similar line with a slur and a fermata. The cello and double bass parts play a rhythmic pattern of eighth notes with triplets, marked *mp*. Measure 68 continues the melodic lines with slurs and triplets, marked *pizz.* and *mp*. Measure 69 has a similar melodic structure. Measure 70 features a more complex melodic line in the first treble staff with a slur and a fermata. Measure 71 concludes the system with a final melodic line in the first treble staff, marked *arco* and *p*.

Machine-like

68

pizz. *f* 6 6 6 6

pizz. *f* 3 3

arco *f* sul tasto *f* *ff* 5

sul pont. *ff*

69

pizz. *f* *ff* *mf* 6 6 6 6

sul tasto *f* *ff* *mf* 3

71

pizz. *mf* *mp* *mf* 3 3 3

arco *mf* 3 3

74

5 5 3

f

3 6 6 6 6

pizz.

f 3 3 3 3

3 3 3 3

mp

3 sul tasto

f

77

pizz.

mf

pizz.

mf 6 6 6 6

pizz.

mf 3 3 3 3

3 3 3 3

mf

81

3 7 6

3 3 3 3

ff

84

ff

ff 6 6 6

pizz. *ff* 3 3 3

ff

85

pizz. *p*

6 6 6 6 6 6 *p* 6

pizz. 3 3 3 3 3 3 *p* 3

p *mp*

pizz. *f*

90

arco *mf*

mp pizz. *f*

pp arco *mp*

pizz. *mf* *f*

95

arco *p* *p* *ppp*

mf *p* *p* *p* *p* *ppp*

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