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## Stravinsky and Time

**Helen Sills**

International Society for the Study of Time  
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### Abstract

Stravinsky's aim of coordinating man and time through music is explored in the context of changes in our understanding of time at the turn of the twentieth century. His growing expertise in the construction of temporalities of differing quality and depth to create a vehicle for greater temporal and spiritual awareness is traced through the early works from *Petrushka* to *Le Sacre du Printemps*, and the background to their time qualities explored. At a distance of 100 years some thoughts are offered on the effect that the première of *Le Sacre du Printemps* had upon the audience with respect to a more particular awareness of time.

**Keywords:** Spirituality; temporality; movement; musical construction; communion.

Among the many explosive riots and verbal battles that have greeted premières of new and ground-breaking works, the uproar provoked by the first performance of Stravinsky's *Le Sacre du Printemps* must surely rank amongst the most famous. One hundred years after the protests that greeted its first performance, the music (and the choreography) still has the power to command a high degree of attention from an audience, and to surprise and even to shock. The centenary of that event on the 29th May 2013 provides a good opportunity to reflect again on the public's reaction on that occasion, in the light of some of the deeper changes in society which propelled this event into the spotlight.

Stravinsky's startling new vision of sound and movement sits well in its historical context. At this time, revolutions in thought around *movement and change* were very much "in the air": Charles Darwin's *On the Origin of Species by Means of Natural Selection* (1859) and *The Power of Movement in Plants* (1880) had raised fundamental questions about creation and evolution, and

Sigmund Freud's *On the Interpretation of Dreams* (1900), new questions about Man's free will and subconscious motivations. Perhaps most unsettling of all, Albert Einstein's very recent paper *On the Electrodynamics of Moving Bodies* (1905), was to be the first stage of a fundamental revolution in understanding our spatial-temporal environment. Until now, time had gained an independent existence as a fixed and unchanging medium for tracking motion mathematically and was not thought to be created, affected or modified by movement. Einstein's paper proposed a new relationship between time and movement, demonstrating that measurements of time in the physical world are *malleable*, able to both stretch and shrink according to the motion of the observer. The concept of Man as a highly rational being in a clockwork universe, which had come to dominate intellectual life since the 17th century, was being radically challenged by these new ideas, and both the origin of physical reality and the nature of the human psyche were undergoing vigorous questioning and experiment.

At the beginning of the 20th century the "time" for a greater awareness of the temporal aspect of our human life had come, and "Time" was ripe for both phenomenological and scientific investigation. The latter years of the 19th century had seen a breakdown in the concept of the mechanical universe, particularly after Darwin's *On the Origin of the Species* had demonstrated that the different species are not individual "kinds" but the result of processes of *change* over time. Also, the tyranny of the clock had been gradually undermined by a *phenomenological* approach to the nature of time. Awareness of time's variable qualities had gathered pace with the work of Edmund Husserl (born 1859), who reflected particularly on first-person experiences of time, in contrast to "clock-time" defined by its relation to matter and motion. He developed a theory about the movement and retention of our mental thoughts and made, perhaps, one of the first experiential links between music and time by relating it to our memory for music and for successive melodic phrases. He also spoke of another level of mental life as "absolute flux" and considered it to be non-temporal or quasi-temporal (an interesting observation in the light of what we now know of the right hemisphere's preference for spatial rather than temporal processing). William James' *Principles of Psychology*, published in 1890, distinguished between experiences of duration in passing and in retrospect, and speculated on the effects of information content. He observed that periods of "empty" time passing seem longer when we pay attention to the passage of time itself, whereas the length of a period of time in retrospect depends upon the amount of memories it contains. The exploration of relative temporalities, perceived both as clock-time and duration was taken up by writers too, from Lewis Carroll's *Alice in Wonderland*, to H.G. Wells' *The Time Machine* and *Tales of Space-Time* in the 1890s. The literary exploration of temporalities culminated perhaps in Thomas Mann's novel, *The Magic Mountain*, based on the experiences of his wife Katia in a tuberculosis sanatorium in

1913. This novel mirrors its historical period from a sociological point of view, explores varieties of experiential time from personal perspectives, and also manipulates the reader's experience of time in its literary structure.

The philosophy of Henri Bergson, published in 1889 and 1896 was particularly influential as the century drew to a close. Bergson perceived Time as two contrasting qualities, chronological time and duration, duration being the continuous progression of past, present and future, dissolved into an unbroken flux. Unlike chronological time, which can be subdivided into a series of consecutive moments and measured, he saw duration as a dynamic process of sustained becoming, apprehended through the intuition, which also reveals the instinctive life force (*élan vital*). For Bergson, the function of art was to express the dynamic fusion of spirit and material perceptions and endow matter with the spirit's own freedom of movement.

Stravinsky's insights into the relationship of music and time were contemporary with this explosion of enquiry into the nature of time, as it was being explored as a dimension, as a relative measurement, and as an experience that could vary from clock-time to duration.

At a distance of one hundred years, the influence of Stravinsky's personality and his early commitment to be worthy of the "musical aptitudes" he had received from God, both of which were uniquely suited to change the direction music was taking at the end of the nineteenth century, is becoming a little clearer. It is difficult, for example, to imagine any composer before Stravinsky, talking about *time* as a *principal purpose* of composition<sup>226</sup>. Yet he closely identified with Pierre Suvchinsky's definition of musical creativity as "an innate complex of intuitions and possibilities based primarily upon *an exclusively musical experiencing of time*" (Stravinsky 1947: 30). Stravinsky's famous statement, that the purpose of musical composition is "to establish an order in things, including and particularly, the co-ordination between *man* and *time*" was made in his Autobiography published in 1936, but his pioneering steps towards developing music's *temporal* aspects can already be clearly heard in the works leading up to *Le Sacre du Printemps*. (Stravinsky 1975: 54)

It is also vital to take Stravinsky's spirituality into account when discussing the works before *Le Sacre du Printemps*, for his exploration of differing kinds of temporality is closely linked with his deep faith and his desire to embody a spiritual experience in music, "as a means of communion, with our fellow man – and with the Supreme Being" (Stravinsky 1947: 142). As he himself

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<sup>226</sup> Except perhaps Charles Ives, for different reasons from Stravinsky. Some of Ives' compositions record the musical events that he could hear going on around him simultaneously, unfolding at their own pace in clock-time. *The Unanswered Question* does however, penetrate the spiritual realm by contrasts that create an extended temporal experience.

remarked, his religion makes him a dualist, for, like Bergson, in the search for the beautiful, the fusion of material and spiritual is everything. Theodore Stravinsky said that his father was of a believing nature, one for whom an independent and transcendent *Truth* exists, and that “praying and adoring are functions of his deepest self” (Stravinsky 1955: 18-19). His desire to coordinate man and time, to augment our sensitivity to a more extensive range of temporal qualities through musical construction, arises from his deeply spiritual nature. For only through being attuned to our temporal dimension can we transcend it, as T.S. Eliot wrote: “Only through time time is conquered”. (Eliot 1968: 14)

Stravinsky saw that the experience of “communion with our fellow man and with the Supreme Being” may be brought about through music, when we are “at one” with time and its many qualities. When we are brought to a point of stillness and timelessness, we can glimpse a reality beyond ourselves:

*Men’s curiosity searches past and future  
and clings to that dimension. But to apprehend  
The point of intersection of the timeless  
With time, is an occupation for the saint —*

...

*For most of us, there is only the unattended  
Moment, the moment in and out of time,  
The distraction fit ...*

(Eliot 1968: 41)

His life-long friend Pierre Suvchinsky described Stravinsky’s personality as a complex mix of the rational and the mystic, a combination of elements that is reminiscent of a certain type of Russian mentality. This type of spirituality is especially characteristic of the Old Believers in Russia who were vividly aware of both physical sense perceptions and the world of the spirit, and who constantly strove to bridge the two levels of reality, to bring them together. (Suvchinsky 1946: 20-21)

An introvert, and bookish like his father, Stravinsky spent his childhood in an atmosphere of music, literature, and philosophical and religious ideas. During his student years at St Petersburg University, Stravinsky was interested in the theoretical and abstract questions of criminal law and legal philosophy, and recalled his interest in the novelists and philosophers of “being”, particularly Dostoyevsky and Gorky, Strindberg and Ibsen (Stravinsky & Craft 1962: 162). He worked, for example, through Victor Nesselov’s *The Science of Man*, published in 1905 with its chapters on subjects such as consciousness and thought,

and the process of perception and the development of life.<sup>227</sup> Robert Craft observed that to judge from Stravinsky's extensive annotation of this book, "this philosopher exerted a major influence on the composer's thought" (Stravinsky 1982: 17). As a pupil of Rimsky-Korsakov, Stravinsky felt great affection for the man himself but disliked his mentality, which "was closed to any religious or metaphysical idea" (Stravinsky & Craft 1962: 187-188). From 1910, in Paris, working with Diaghilev and the Ballets Russes, Stravinsky gained much-needed emotional and spiritual support away from the politics of the Company from the group of creative friends known as the "Apaches", with whom he discussed new aesthetic ideas and was introduced to the French avant-garde (Funayama 1986: 273; Pasler 1982: 403-7). These early circumstances of his life helped to nurture his spiritual insights and test them against the latest ideas. They prepared his creative voice to be a "turning around" point, from the works of late nineteenth century composers that arose from their emotion-laden inner worlds, to music based on a "musical experience of *time*", which appealed instead to the spirit.

Stravinsky's rise to fame with *The Firebird* was meteoric. Whilst studying with Rimsky-Korsakov, from early consultations in 1900 until the composer's death, he had observed his teacher's mastery of timbre and placing of orchestral colours and quickly produced his own masterpiece in this genre of mystery and magic. But at frequent meetings with the "Apaches", he found not only a haven of intellectual enquiry, but also generous support for new ideas and works of his own. Its members had rallied around the flag of Debussy's *Pelléas et Mélisande*, and it was through personal contact with Debussy and his new style that Stravinsky found affirmation for the new direction his own work was taking. He learnt not only from Debussy's musical techniques, but also from his spirituality, for he saw that Debussy's attitude to creativity and time, in contrast to his own, was largely static and contemplative in quality. Debussy regarded music as the expression of "the mysterious affinity between Nature and the Imagination" (Debussy 1902: 74). In contrast, Stravinsky's spiritual response was to embrace life robustly in all its aspects, and he believed that the true creator's ability was "to find about him, in the commonest and humblest thing, items worthy of note" (Stravinsky 1947: 54). Stravinsky felt that although Debussy had rescued music from being predominantly dependent for its forward movement on the flow of a composer's inner emotional life, music was still not wholly freed into the dimension of time: it remained imprisoned by passive movements more associated with the visual sensuality of Impressionism (Stravinsky 1947: 58, Brelet 1949: 692-5). Stravinsky experi-

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<sup>227</sup> *The Science of Man* by Victor Ivanovitch Nesselov (1863-1920) was published in two volumes in 1897 and 1902, and centered around the correlation of positive science and revealed religion. Stravinsky's copy was the third edition of 1905, published in Moscow.

enced sound as active and participating in Divine creativity, “a matter of balance and calculation through which the breath of the speculative spirit blows” (Stravinsky 1947: 50). His works are constructed to emulate patterns of living and being and to align us with their varieties of temporal experience.

Stravinsky’s view of art as “a form of communion” was above all a practical one. He constructed each stream of sound to create a temporality by its “rhythmic manners” and by the degree of complexity of its content. His sensitivity to sounds, overtones and vibrations enabled him to select pitches, intervals, motifs, chords, and, most importantly, their position in the phrase as a whole, to embody a haunting quality and have echoic value. In the works leading up to *Le Sacre du Printemps* we can observe how he develops techniques for constructing and combining streams of sounds with regard to their resonance and their temporality. He then unfolds a succession of temporal qualities of varying depth and density, that are aligned with our experience of being and becoming. He remarked that one arranges the horizontal file as one wants, but that the *vertical* assemblages, in order to communicate with the audience, “must justify themselves before God!” (Stravinsky & Craft 1979: 248). But however mystical his spirit, Stravinsky’s musical appetite was always stimulated by the actual physical process of putting materials together: asked if he agreed with W.H. Auden’s view of music as “a virtual image of our experience of living as temporal ...”, Stravinsky replied that however unverifiable, he supposed that it was, but that this kind of thinking about music was a different vocation for him: he couldn’t *do* anything with it as a truth, and his mind was a *doing* one (Stravinsky & Craft 1979: 18). Stravinsky’s succession of temporalities always lead us on a journey, through a *time experience*, which for him was a *dynamic* passage through time<sup>228</sup> (Stravinsky & Craft 1982: 127). His artisan’s attitude to practical “making”, combined with his spiritual discernment in selecting haunting combinations of sounds at the piano, made him a uniquely-placed vessel for the exploration of time in musical construction.

The *subjects* that Stravinsky chose for the works from *Petrushka* to *Le Sacre du Printemps* lend themselves particularly to the embodiment of contrasting time qualities and both material and transcendent realities in music. They show him experimenting with discrete layers of sound to create dynamic journeys, not for the emotions or intellect, but for the spirit. We are transported from the everyday bustle of the Shrovetide fair to the temporal/timeless experience of *Petrushka*’s soul; we follow the path into the desert to behold the timeless glory of *Zvezdoliki*, the “King of the Stars”; we are invited to expe-

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<sup>228</sup> In the late 1950s one of Stravinsky’s criticisms of electronic music was that “the shortest pieces ... seem endless and within those pieces we feel no time control” (Stravinsky & Craft 1979: 111).

rience the delicate two-dimensional time world of Japanese poetry and prints in *Three Japanese Lyrics*; and we participate in a succession of time qualities to bridge the “earthly joy” and “celestial triumph”, as experienced by the ancient Slavs, in *Le Sacre du Printemps*.

Stravinsky’s fleeting vision of the pagan rite which became *Le Sacre du Printemps* came to him in 1910 as he was finishing *The Firebird*. But the realisation of the vision was delayed, by what Stravinsky called the need to “refresh” himself with a piece for piano and orchestra (which became *Petrushka*), and after his return to Oustiloug, by the *Two Poems of Balmont* and *Zvezdoliki*. Continuing his interest in creating the contrasting temporalities that he had achieved in *The Nightingale*, Stravinsky explores a more ambitious spectrum of time qualities in *Petrushka* from “now” to “timelessness”, as the meaning of the work as a whole.

### **Time qualities in *Petrushka***

There are five qualities of time in *Petrushka*: the cyclical time of the religious festival of Shrovetide, the clock-time activity of the bustling fair, the suspended time of the magic trick, the inner psychological turmoil of *Petrushka*, the Romantic hero, and the temporal/timeless experience of *Petrushka*’s soul as he dies. “This double existence”, said Stravinsky “is the key to the enigma, a key not possessed by the one who believes he has given him life, the Magician”. (Stravinsky & Craft 1979: 67)

The story of *Petrushka* is set within what Mircea Eliade has called the “Great Story”, the annual cycle of creation and man’s call for the breakthrough of the supernatural into the natural world in the regenerative process. Shrovetide is the period of preparation for Lent, during which it is customary to make confession to a priest and be absolved from past sins. It is also the time of the Spring Equinox, during which a puppet of straw or wood was carried in procession and eventually burnt or drowned, symbolising the end of winter and the coming of new life. In *Petrushka*, this period of time is recalled and celebrated by associated events, by familiar characters and activities usually found at the fair, such as the dancing of the bear, the strumming of the gusli, and the songs of the volochebniki (Easter carol singers). Just as the festival of Shrovetide throws off the old and celebrates the coming of new life, so we hear the new, vibrant life of *Petrushka*’s soul as he leaves the world in the closing scene.

Stravinsky creates the clock-time “now” of the bustling fair by superimposing or interjecting musical “events” that are distinctively different in their tonality or rhythmic pacing, on to a background of non-developing tremolo semiquaver movement. Though the background motion gives an impression of activity and “becoming” it is in fact non-directional, forward movement being

achieved more slowly as we “pan” around a series of cameo scenes, as in a film. At figures 18 and 22 in the score, our attention is directed to the Barbary organ and dancer by the abrupt contrast their diatonic harmony and regular metre makes in this context of Russian motifs and irregular rhythms: their music is highlighted against this background by being scored for the bright, contrasting timbres of solo flutes, clarinets, piccolo and trumpet, and by a sudden change of pace. The vendors and carol singers reassert the non-European style of the fair with motifs within the interval of a fourth, reminiscent of old Russian chant and folk-music: these tetrachords build a tone-semitone-tone motif above their pitch centre and as our attention moves, their transpositions build a mosaic out of the various centres of activity on stage. A drunken crowd of carol singers is portrayed by an Easter carol in canon at two pitch centres, (figs. 11, 40) aptly conveying a quality of time skewed by dense confusion of mind and a gravitational pull to the earth: it anticipates a more heavily drawn passage in *Le Sacre du Printemps* (fig. 53).

A tritone transports us from this very “here and now” world of events unfolding at a different pace and with contrasting pitch collections, to the chromatic sound world of the magic trick (*tour de passe-passe*), whose “sonorous magic” so impressed Debussy. It is but a pale contrast to the subsequent temporal experience of *Petrushka*’s soul however, for it is constructed to negate depth and forward movement. Stravinsky imitates Debussy’s brief, repeated, non-directional, non-developing motifs to evoke the Charlatan’s deceiving gestures, his magic illusion and his occult suspension of natural laws. Here the melodic shapes are fragmented and contrasts of register and timbre are minimal, with many muted glissandi and harmonics. In the 1947 version, Stravinsky refined the web of sound, making it even more homogeneous and transparent, by reducing two harps to one, omitting the rich high register of the bassoons, thinning the lower strings, removing the resonant depth of the bell notes, and replacing some scoring for harp and celeste by introducing a piano. The music is magical, but static and lacking in depth, for the Charlatan “does not hear the melodies in *Petrushka*’s heart or see the pictures in his soul”. (Stravinsky & Craft 1979: 200)

The fourth quality of time, within the stage *on* the stage, is created in the scene between *Petrushka*, the Moor and Ballerina, which is directed at the audience. The forward flow of music for *Petrushka* is spasmodic and irregular, dominated by the flux of his emotions: he is not the usual comical bully, but a brooding puppet, identified with the powerful feelings of the Romantic musician or poet. He has been digging a hole to escape: the tritone now expresses the complexity of *Petrushka*’s feelings, the clarinet arpeggios juxtapose the harmonic planes of C and F sharp, ensuring the maximum possible dissonance of overtones. His angular movements are set to irregular rhythms, fluctuations in density of texture, contrasting timbres and interval dissonances that make it harder to make sense of its aural patterns, drawing us into

Petrushka's inner world and ever further from the clock-time of the fair. In contrast, the music of the brutal Moor and the heartless Ballerina proceeds with unwavering, insensitive regularity of tempo in the "here and now". The Moor's sinister self-preoccupation is communicated by his slow-forming phrases around five notes, the shallow personality of the Ballerina revealed by her simple arpeggiated patterning and Barbary-organ style accompaniment. Stravinsky *separates* their dances in the Waltz, setting 2/4 against 3/4 and sharply differentiating their style, register and timbre, emphasising their lack of meaningful contact with each other.

Just as Petrushka's two harmonic planes were conceived as an insult to the public, so the dialogue for two trumpets in two keys in the final scene shows that his ghost – the real Petrushka, with a soul – is thumbing his nose at the Magician and is still insulting the public. Here, Stravinsky contrasts two temporal realities, the worldly and the spiritual. As Petrushka lies dying, the bright timbres of piccolo, flute and clarinet separate his new and intensely vibrant temporal/timeless experience from the now far-distant activity of the fairground. The woodwind timbres project flashes of light against the tremolo figures of a three-tiered haze of harmonics in the lower strings. Four aspects of Petrushka's life are recalled by a nostalgic phrase on the clarinet, the warmth and simplicity of a solo violin and the wistfulness of the bassoon against high chromatic tremolo figures falling in the violins, followed by a glimpse of his "angst" for low piccolo: through his memory, time past is revisited.

The arrival of the policeman and Magician to repetitious and angular music at fast walking speed, brings us abruptly back to clock-time. Three more events of Petrushka's life are recalled: the magic trick motif, his first exit from his cell, and the fairground bustle, now muted and drawn out in triplet quavers. When the oboes, *cor anglais* and horns slow this figure to duplets a tone higher and the lower strings anchor it there, the sense is both of a widening musical space and of an even more intense present moment. As Petrushka is trailed towards the little theatre, the heightened temporal experience of his soul is set apart by the bright fortissimo "vivo" of the two muted trumpets (in two keys as before), against the muted quaver movement which continues to undulate far below him. The final pizzicato notes, a resonant tritone, affirm his continued existence. In 1959 Stravinsky remarked: "I was, and am, more proud of these last pages than of anything else in the score...." (Stravinsky & Craft 1981: 137)

### Time qualities in *Zvezdoliki*

It was perhaps Stravinsky's success at these spatial-temporal experiments with movement and timbre in *Petrushka* that led him to set a poem by Bal-mont with an explicitly spiritual context of a soul's journey along a path into the desert to salvation. Stravinsky's setting creates an otherworldly experience of a place in the heavens where time and motion is slowed or even negated. Stravinsky later described *Zvezdoliki*, composed in 1911, as in one sense, his most "radical" and difficult composition (Stravinsky 1979: 51). He prepared himself perhaps, by listening to a great deal of Debussy and Scriabin at this time. Debussy, to whom the work was dedicated, was disconcerted by its musical idiom, yet clearly felt its strange power to evoke extra-terrestrial sensations. After playing the work with Stravinsky simply in piano duet form, he wrote to him, that it was "probably Plato's harmony of the eternal spheres", being "a cantata for planets" whose performance on earth "would be lost in the abyss" (Stravinsky 1979: 51). Although Stravinsky described the poem as obscure as poetry and as mysticism, he found the sound of the words "good" for creating resonant timbres on vowels, and contrasting textures. A great number of spiritual verses preserved among the Old Believers are about the end of the world and flight into the "desert". To move away thus from the world's temptations was the way to find salvation and eternal life.

The three-note motto which heads the work may well be a reference to the octatonic scale used by the Old Believers, and its function to western ears as part of the dominant seventh which moves towards resolution is always negated by Stravinsky's harmonic settings of it throughout the work. The immense distance to the "King of the Stars" is created by a dense homophonic description of his shining face and sparkling eyes by the all-male choir, moving flexibly against a high, pianissimo but reverberating tremolo in the strings at the opposite ends of the timbral and textural spectra. After the fifth bar, the pace of change begins to accelerate towards a huge expansion of register at the seventh bar. At the description of his robes, the rate of harmonic change increases from 3:2 to 4:3 with additional suspensions, rising chromatically in pitch towards a full textured account of the wild thunder and lightning flashes which surround him. At the spiritual climax (figure 7), the sculptured vowel sounds and tensioned movements are halted and stilled at a very wide pitch register of more than five octaves. He emphasises the significant nature of this arrival by setting the chorus in simple, bleak homophonic octaves. The crucial question, "Do you keep the Word?" is voiced against a penetrating chord of C in the orchestra, that has both the major and minor third, as if from outside the world of time. The harvest at the end of the age is ready, and the chilling and timeless profundity of the archaic biblical words used here are framed by densely chromatic orchestrations of the initial three-note motif, "*tranquillo e maestoso*". In the final sections, we withdraw into the desert as the density of the three-note motif settings melts away at a stately pace, in wide-pitched

tremolos. A final orchestral statement of the motif elongated at half-speed to spread across six octaves evokes the starry path stretching into the desert and Eternity.

In *Petrushka* and *Zvezdoliki* Stravinsky experiments with combining musical techniques of both East and West to create great spatial depth and distance, and extended temporalities. His belief in the power of music to express spiritual insights arose not only from his spiritual nature but also his interest in the spirituality of his native Russia as expressed in its music both sacred and secular. The Apaches quickly saw him as the natural heir to the Russian composers they admired, particularly Borodin and Musorgsky, who had captured the “natural” musical style of the Russian people. His musical depictions of spiritual experience in the liberation of *Petrushka*’s soul and the vast self-denying celestial wastes of *Zvezdoliki* draw on the very disparate creative principles of Western and Russian tonalities and melody and phrase construction, but bring them together in a collision of cultures that was quite new and very radical.

### **Time qualities in “Three Japanese Lyrics”**

Just as he was putting the finishing touches to the orchestration of *Le Sacre du Printemps*, with its accumulation of raw power, Stravinsky was attracted in quite the opposite direction, to explore the minimal, ambiguous time world of Japanese poetry and woodblock prints. “Le Japonisme”, an interest in the arts and culture of Japan, had become very fashionable in Western Europe, but Stravinsky’s interest was particularly encouraged by his friendship with Maurice Delage, a business man who had links with Japan. Delage was a fellow member of the “Apaches”, and became the dedicatee of the first of the three Lyrics.

In the summer of 1912, Stravinsky had read a little anthology of Japanese lyrics – short poems of a few lines each, selected from the old poets. The impression which they had made on him was exactly like that made by Japanese paintings and engravings. He remarked that “*the graphic solution of problems of perspective and space shown by their art incited me to find something analogous in music*”. (Stravinsky 1975: 45)

Later, during a visit to Japan in 1959, Stravinsky revealed to an interviewer that he was attracted at that time by Japanese woodblock prints, *a two dimensional art without any sense of solidity*. Having also discovered this two-dimensional nature in some Russian translations of poetry, he “*had attempted to express it*” in his music (Stravinsky 1959). The Japanese poems and prints in his possession were “two dimensional” in nature and lacking in solidity, but Stravinsky was attracted to finding the musical equivalent to the temporalities that he found there, that were delicate, ambiguous and elusive.

The art of waka poetry, the Japanese lyrics of Stravinsky's anthology, is the conscious art of "poem-making". The themes of waka poetry were varied, but their content was tightly limited and structured within 31 syllables, with an upper phrase of 5 + 7 + 5 syllables, and a lower phrase of 7 + 7 syllables. There was no strict concept of "line" and rhyme was considered to be a fault, but the recurrence of similar sounding syllables could set up memorable rhythms within its very concise structure. The words of waka poems were carefully chosen and placed with great regard to the total effect. Poems were linked across generations by reference words (*utamakura*), allusion and intertextuality, so that words can have more than one meaning, adding depth to their associations. Emotions from the past were often updated in the present: in the first part, for example, the poet may refer to a geographical place with a poetic tradition, and in the second part imbue it with a new emotion. Or the movement may be to a new symbolism, with reference to the meaningful re-appearance of a significant object. The most admired poems thus embody an implicit ambiguity, either in subject or outcome, creating a mood of refinement and elegance. (Kamens 1997: 23-62)

The two dimensional effect of this poetic form often arises in large part from the juxtaposition of two temporalities and the *movement* between them, which leaves us in a delicate, temporally ambiguous location: the effect is of non-solidity and spatial-temporal open-endedness. To construct the musical analogy of this two-dimensional effect, Stravinsky selected three poems, each with a different perspective on the subject of Spring, a favourite subject of waka poetry. Each poem juxtaposes two images to create temporal ambiguity: the first tells of snow coming to cover white spring flowers, the second, the first rushes of the thawing ice floes as an image of spring flowers, and the third, the confusion of distant white clouds with cherry blossom. There is even a *progression* in temporal ambiguity between the three songs, passing from doubt about the arrival of Spring in the first song, to vivid "here and now" confirmation of its arrival in the second, to the timeless symbolism of cherry blossom in the third.

In the first place, he begins to imitate the two-dimensionality of the text by *contrasting the movement styles of the two streams of sound, the vocal and the instrumental*. The vocal line represents the first flowers of spring in all three songs. This solo soprano line has a consistent style, always setting one syllable to one quaver and patterning pairs of pitches the interval of a third apart. In the setting of the texts, Stravinsky spoke of "succeeding by a metrical and rhythmic process" for "nothing could have lent itself better to this than the Russian version of the Japanese poems, owing to the well-known fact that Russian verse allows the tonic accent only" (Stravinsky 1975: 45). To ensure that the temporal quality of each song is created first and foremost by the rhythmic flow of the *music*, Stravinsky reduced the power of the literal meaning of the words (in their Russian translation) by eliminating all accentuation:

he shifted all the “long” syllables onto musical “short” beats, *so as to achieve the linear perspective of Japanese declamation* (Taruskin 1987: 170-171). The vocal part also evokes the syllabic proportions of waka poetry and its 5:7 rhythmic units, and their recurring resonances. Firstly, the lengths of the fragmented vocal phrases, and the number of pitches in successive phrases stand in ratios such as 5:3, 6:4, or 8:6. Secondly, Stravinsky imitates the recurring sounds of Japanese syllables by setting the text to “circular” motifs in Russian folk-song style. He captures the haunting effect of the original Japanese poem by placing resonant syllables on pitches which recur at different points of the motif. In stark contrast to the cumulative power of *Le Sacre du Printemps*, Stravinsky creates three delicate images which embody both structure and ambiguity.

Stravinsky likened the two dimensional effect of waka poetry to that of the Japanese prints which he owned. A photograph of Stravinsky in his living room at home in Oustilug in 1912 shows four Japanese prints hung vertically on the left hand side of the wall behind him (Stravinsky 1975: Plate 30). The top print is “Festival of Lanterns on Temma Bridge in Settsu Province” by Katsukisha Hokusai. The scene is composed of rhythmic lines within a two-dimensional framework, and is harmonious but unreal, even unstable in its perspectives. The rhythmic lines of the bridge, boats and river lead the eye somewhere *outside* the picture: the encompassing of its rhythms expands our sense of space, creating an effect of open-endedness, even instability. There is a temporal effect too: the print captures a single point in time in the long and rich history of the location, yet at the same time curiously extends our sense of a temporal continuum into the future.

In *Three Japanese Lyrics* Stravinsky achieves the elusive spatio-temporal effect of the waka poem and the Japanese print *by juxtaposing two streams of rhythmic movement that do not meet or relate*. The timbre of the vocal line always stands out in bright timbral contrast to that of the soft, muted group of solo instruments. Further, he imitates their two-dimensionality by structuring his two rhythmic lines so that their actions *against* each other are analogous to the movement of the waka text and the open rhythmic perspectives of the woodblock print.

The two streams of sound which create each song are to be heard separately, but held in tension against one another as they unfold. The fragmentation of the vocal line makes a direct contrast with the continuous instrumental line and holds it discrete and distinct. The pace of each line of motion remains constant and distinctive in itself, but each *progresses against the other in a way analogous to that of the text*. Together, they create an open-ended, two-dimensional experience that has both delicacy and temporal depth: the effect is of a hybrid, elusive temporality. As with the innovative rhythmic combina-

tions of *Le Sacre du Printemps*, the juxtaposition of independent, asymmetrical rhythmic streams creates temporalities that are quite new in Western music.

The poem of the first song is by Yamabe no Akahito:

*To one I love  
[I] want to show  
plum blossoms on the plum tree  
[They] cannot be identified one from the other  
because the snow fell<sup>229</sup>*

In this song we move from the thought of showing a loved one the spring flowers, to snow falling to cover them: winter has not yet given way to spring. The fragmented soprano part patterning six pitches is heard against the continuous instrumental parts patterning all twelve semitones, in similar quaver movement. As the instrumental stream expands higher and lower to surround the vocal “flowers” it moves with a more marked pulse, like snow falling.

The poem of the second song is by Masazumi Miyamoto:

*By the mountain-valley wind  
of melting ice  
through every crack  
overflowing waves are  
first blossoms of Spring*

The instrumental layer represents the wind whistling through the valley with circular figures around a central *sul ponte* D sharp. Out of this movement the fragmented thirds of the vocal part emerge and unfold at a stately pace evoking the appearance of spring flowers.

The poem of the third song is by Ki no Tsurayuki:

*Cherry blossom  
it looks like they are in bloom  
between the mountains  
white clouds can be seen*

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<sup>229</sup> I give a “spare” word-for-word translation to evoke the elusive temporality of the original poem, rather than the looser translation that would be used if the song were to be sung in English.

Various comparisons of cherry blossom to white clouds appear in at least five of Tsurayuki's poems. The cherry tree is the national tree of Japan and it held an almost mystical position in the waka tradition, for from its origin as a symbol of unity and solidarity among the people, it became an image of shade and peace and its full-blown blossom a sign of Man's destiny or immortality. This song contrasts the small intervals of the short vocal phrases against the large, flexible intervals of the four bar instrumental variations. They join in legato style for four bars only, to celebrate the fullness of the blossom and the season of spring. The song – and the set of songs – is sealed by a diminution of time values.

### **Time qualities in *Le Sacre du Printemps***

Stravinsky's exploration of ways to express new temporal experiences in music, from clock-time to the psychological and spiritual, from the cosmic to the minimal and elusive, reached a dramatic climax in *Le Sacre du Printemps*.

Stravinsky's vision of a ritual self-sacrifice among the ancient Slavs seems not to have been inspired by any conscious technical theories but to have come directly from his sub-conscious: he described himself as the *vessel* through which the work passed. "I heard", he said, "and I wrote what I heard" (Stravinsky & Craft 1981: 147-8). It was in recalling that period of his life just before the outbreak of War in 1914, and his patriotic feelings for Russian folk poems, that he later observed that "the phenomenon of music is given to us with the sole purpose of establishing an order in things, including, and particularly, the coordination between *man* and *time*. To be put into practice, its indispensable and single requirement is construction" (Stravinsky 1975: 54). His belief in the necessity of construction to coordinate man and time, already formed by 1913, can be traced in its first purposeful form from about 1910 onwards, in his juxtaposition of timbrally-contrasted layers of sound to interact to spatial-temporal effect. In the context of contemporary thought, the *maturing* of this creative philosophy in *Le Sacre du Printemps*, may be seen as a sudden eruption from Stravinsky's subconscious of a series of increasingly complex and "self-organising" musical movements that mirror a much discussed contemporary topic: the *relative* relationship of motion and time.

Commissioned by Serge Diaghilev for the Ballets Russes in Paris, and premièred on the 29th May 1913, Stravinsky's re-presentation of the temporalities of the solemn pagan rite in which sage elders, seated in a circle watched a young girl dance herself to death, took the public by storm. The conductor recalled that everything that could be thrown at the orchestra, *was*, but that they just went on playing. To the general public, the subject matter appeared, perhaps, to be threateningly unfamiliar and "primitive". For the choreodrama of the ballet, Stravinsky had approached Nicholas Roerich, a painter specialising in

pagan subjects “who knew the secret of our ancestors’ close feeling for the earth” and could represent in the costumes and set design pictures of “earthly joy and celestial triumph, as understood by the Slavs”. (Stravinsky & Craft 1979: 77)

The ballet is in two scenes: the first, “L’Adoration de la Terre” depicts the Slavs’ closeness to the earth as they celebrate the rhythms of Nature, its cycles of return and the eternal force which sustains it. We see the ritual dances and games of young girls, the divining of the future by a very old woman, a game of seduction and the entrance of the oldest and wisest man of the village to imprint a sacred kiss on the earth. The second scene, “Le Sacrifice”, sets the scene for “celestial triumph” and builds in power towards the ritual offering of human life. As night falls, young virgins perform circular dances on the sacred hill and choose the victim that they will honour. She will dance herself to death before the elders clad in bearskins – the ancient Slavs believing the bear to be man’s ancestor. The choreography was by the newly-discovered dancer Vaslav Nijinsky, who conceived the ballet as de-centralised, with each of the forty seven dancers as a soloist with an individual part (Hodson 2008). The choreography was described, initially at least, by Stravinsky, as of the “utmost importance”, in that it provides an additional layer of complexity to contribute to each quality of temporality. The dialogue that is being carried out through varied temporal qualities in sound is reinforced *visually* by the physical gestures and circular patterns of the dancers on the stage, which have been designed either to synchronise or counterpoint patterns in the music.

Stravinsky seems to have constructed his dialogue of temporalities, from the time of “Earthly Joy” to the sacred time of “Celestial Triumph”, quite instinctively. In Bergsonian terms, Stravinsky’s organisation of the movement of both rhythm and pitch builds a process of “being” and “becoming”, matter taking on the movement of the spirit, in “a single endless dialogue, an inconceivable conversation” (Grainger 1974: 90-91). This conversation, expressing the growth of power in *Le Sacre du Printemps* is however, crafted with four clear types of movement which are elaborated upon, to vary our depth of temporal experience. Paradoxically their succession is very clear-cut, and they emerge from each other in blocks of dialogue from the “clock-time” of the work’s Introduction. I have called these four types of motion simply A, B, C, D. Each type of movement is uniquely distinctive in its construction and quality, but in dialogue they bridge these earthly and heavenly qualities by a “self-organising” process in which each level gives rise to the next, *a process quite new in music at this time*. As each temporal level emerges from the previous level, it “gives substance, and therefore stability, to the category of the present”, leading us seamlessly through a spectrum of temporal experiences (Stravinsky 1975: 54). Stravinsky achieves these changes of temporal level *by a change in the musical elements that are dominant*. This process heightens the

layering and recessing of juxtaposed streams of sound and increases the complexity of their interactions and non-interactions.

**Movement Type A** begins the work. It is the movement in the “here and now” of clock-time, of living creatures and their potential for growth and becoming. In the Prelude to Part One, Stravinsky evokes “the awakening of nature, the scratching, gnawing, wiggling of birds and beasts” (Stravinsky & Craft 1981: 141), and the “terror... at secret forces... that can grow and develop infinitely” (Stravinsky 1913). Individual orchestral instruments develop their solo musical lines independently, with contrasting pitch collections, and *in the “rhythmic manners” of their own “umwelt”, or time scale*. The individual lines (beginning with the haunting high register of the bassoon) are not at all blended but are held clearly distinct from each other by highly contrasting timbres.

**Movement Type B** makes its first dramatic appearance at the beginning of “Les Augures Printaniers”. It is forged from the sudden and dramatic gathering of the disparate elements of Movement A into a dense linear force. As the curtain rises on the dances of the young girls we are shocked by the sudden concentration of energy and directed linearity that now brings massive forward propulsion. All the individual elements of movement A, rhythms, pitch collections, registers, dynamics, timbres and textures, are subsumed into a single, unanimous dynamism constructed of one or more distinctive strata unified by a single pitch collection and pitch centre. The emergent temporality is made still more immediate and powerful by the clash of non-metrical accents against the metrical pulse.

**Movement Type C** begins to emerge from this collective life force just nine bars later at figure 14. Power and momentum now diversifies into separately defined interacting strata of a circular kind, whose revolving rhythms and melodic motifs mirror the circular dance formations of the ancient Slavs. The skilfully designed juxtapositions of these circular motifs and melodies, in varying number, graduate the depth of time that we experience, and begin the long expansion of musical space and time towards the experience of “celestial triumph”. They draw us away from a focussed “now” into the absorbing time of ritual. All dynamic force is now becalmed: the angular figures of Movement B give way to short ostinato motifs and the conflict between metre and accents collapses into synchronised regularity. The repeating Khorovod themes of motion C are largely contained within a range of four or five pitches. Interacting strata of movements are held distinct by heightened contrasts of timbre, and recessed by texture and dynamic. The extent to which we experience an expansion of musical space and a deepening of experiential time depends on the degree to which these distinct strata are synchronised, are rhythmically regular and harmonically related, or, by contrast, are irregular and juxtaposed to create tension. The most complex juxtaposition of irregular circular

strata occurs at figure 64 just before the procession of the Sage: a long irregular repeating theme for trombones is pitted against a circular repeating theme for woodwind and strings and a short repeating motif for horns, and finally a strident trumpet motif. The degree of regularity or irregularity between strata creates variable densities within Motion C and hence fluctuating temporalities along a spectrum from the regular and peaceful, to the irregular and disturbing.

**Movement Type D** is first heard in the Introduction to Part Two, “Le Sacrifice”. It expands the musical space and time of the work to its furthest extent as a context for the following ritual. Here, the brooding context of great musical space and depth of time are created by just two streams of contrasting movement. At the macro level, an irregular and vastly extended recall of a Khorovod melody is heard intermittently in changing metres and timbres: at the micro level drifts of quavers are repeated regularly in two bar phrases. Their highly contrasted rates of unfolding evoke a state of static succession, of great space and “other-worldliness”. The effect is maximised by a very wide pitch range, highly contrasted dynamics, transparent textures, harmonics for stringed instruments and muted wind and brass tones.

CONSTRUCTION OF TEMPORALITIES IN *LE SACRE*

<i>Part One</i>	<i>Movement Type</i>	<i>Figure</i>	<i>Comment</i>
Introduction	A		Preview of C at fig. 12+3
Augurs of Spring	B	13	0-11 dissonance
	C	14	3 regular circular strata: accompaniment figures
	B	14+4	
	B/C	15	
	C	16	3 regular circular strata: emergent melodic motif
	B	18	
Ritual of Abduction	C	22	Fluctuates between 1&4 strata: emergent melody fig 25, new irregular melodic stratum 28+4
	B	37	
Spring Rounds	C	48	1-4 strata: lapidary rhythms, new harmonic density fig. 53
	B	54	
	C	56	waiting
Ritual of Rival Tribes	B	57	
	C	61	2 regular circular strata
	B	62	
	C	64	2 circular strata, 1 irregular (Sage)
The Sage		65+2	Irregular 3rd stratum emerges
		71+1	waiting: potential
Dance of the Earth	B	72	

<i>Part Two</i>	<i>Movement Type</i>	<i>Figure</i>	<i>Comment</i>
Introduction	D	79	
	C	84+3	2 strata: brooding development
Mystic Circles of Young Girls	C	91	Circular Khorovod / accomp. figs of fluctuating density: potential
		103	‘Orchestral haemorrhage’
Glorification of the Chosen One	B	104	
Evocation of the Ancestors	B	121	
Ritual Action of the Ancestors	C	129	2 strata intertwined
	C	132	3 strata recessed, developed
	B	135	Gestural
	C	138	recessed strata: ancestors circling
	C	139	2 strata, fig.129 modified
Sacrificial Dance	B	142	
	C	174	fragmented strata: halts momentum
	B	180	resumes momentum
	C	181	3 strata
	B	186	

Whereas the dominant characteristic of Movement A was the *individual “um-weld”* of each creature, that of Movement B was *collective rhythmic* force, and that of Movement C was *interacting circular strata*, the foremost musical element of Movement D is that of *timbre clarifying spatial distance*. Stravinsky remarked that “though the mediumising of sound levels does only negligible damage to some music, it deprives *The Rite* of one of its dimensions...” (Stravinsky & Craft 1982: 90). The clarification of sound levels, and hence the definition of streams of movement, make the development of variable densities clearly audible. *Le Sacre du Printemps* is largely a dialogue between Movement Types B and C set in the contexts of the introductory movements of Movement Types A and D. The explosions of linear energy which we hear in Movement B both drive the ritual forward and promote the emergence of fragments of “ritual” time which are created in varying qualities of Movement C.

“The endless dialogue and inconceivable conversation” of *Le Sacre du Printemps* is constructed from the interplay of Movement type B, which varies the force and pace of our *forward* momentum, and Movement type C, which modulates the *depth* of time that we experience as the atmosphere of the ritual takes effect. This dialogue of temporal densities embodies the notion of self-sacrifice for the regeneration of the earth and the good of the community which is brought about in the time of Motion C, but which is made effective through the raw energy of Motion B. These varying movements of layers of sound are supported by pitch collections of varying clarity: Stravinsky’s construction of this dialogue of variable densities and temporalities also involves the careful selection of pitch networks appropriate to the density of the time quality to be created. Allen Forte, Pieter van den Toorn and others have shown how Stravinsky fluctuates between diatonic, “8-note”, octatonic and chromatic pitch collections, as the needs of clarity or attraction to a pitch centre require (Forte 1978; van den Toorn 1986: 130). The play of expansion and contraction within supersets and subsets and between diatonic, 8-note, octatonic and chromatic contexts is a strong contributory factor to the direction, pace, and quality of each of these four types of movement, and transitions from one type to another are important to its creation of a living organism.

The power of *Le Sacre du Printemps* lies in the fact that we “live through it”, as its qualities of time unfold and fluctuate in depth like our everyday consciousness. The function of a ritual, is not only to create a structure that may be entered into and lived through, but to enable by *cumulative* activity, new realms of experience, both individual and collective, which are not ordinarily accessible. The form-building process of “becoming” heard in the music is reinforced visually by the human gestures on stage, and in the absence of a detailed “story”, we connect its “choreographic succession” into a continuous entity. Stravinsky even marked directions in the score wherever gestural patterns on stage are to coincide or counterpoint the rhythmic structure of the music. He referred in his *Montjoie* article of May 1913, to the dynamism of Nature’s endless becoming and the potential of the musical substance of *Le Sacre du Printemps* to renew itself ceaselessly, its capacity for “imitating nature in its way of operating”<sup>230</sup> (Stravinsky 1913). Working hard at rehearsals in February 1913, Nijinsky described the work as “really the soul of Nature expressed by movement to music.... It will be danced only by the corps de ballet, for it is a thing of concrete masses, not of individual effects” (Stravinsky & Craft 1979: 95). “Play *Le Sacre*”, wrote Stravinsky to Andrei Rimsky-Korsakov, “I am certain that in time you will begin to feel it....” (Stravinsky &

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<sup>230</sup> On the 29th May 1913, Stravinsky published an article: “Ce que j’ai voulu exprimer dans *Le Sacre du Printemps*”, in the journal *Montjoie*. Writing, the following August, to amend the English translation of this article, about to be published in *Muzyka*, Stravinsky’s language reflects Bergsonian concepts of “becoming” and dynamic substance, speaking of a force concealed within the music, its turbulent power and the growing and swelling of its musical substance.

Craft 1979: 25). Stravinsky later described *Le Sacre du Printemps* as “architectonic”, “a series of rhythmic mass movements of the greatest simplicity which would have an instantaneous effect on the audience...” (Stravinsky 1975: 48). It was a work in which he pushed himself a step further towards “a vast abstraction”.

One hundred years on, several thoughts present themselves about the historical significance of *Le Sacre du Printemps* and the disturbance it caused, in relation to the awareness of time and temporalities.

Firstly, the work re-presents a pre-historic ritual which expresses the dependency of a community on a return to sources for the regeneration of Creation, for a repetition of that outpouring of energy, life and fecundity which occurred at the Creation of the world. It leads to the breakthrough of the sacred or “supernatural” into the earthly world and brings men into relation with unseen powers. Archaic man attached importance to the value of *collective* return as a spiritual activity, for the healing of the community and for affirming social belonging and solidarity. Uniting the physical, mental and emotional aspects of a human being in a ritual, or act of corporate symbolism dealing with *time*, has a powerful effect at a deeper level of the human psyche than that of the emotions or intellect alone. In great contrast to prevailing attitudes in society, *Le Sacre du Printemps* was composed and first performed in the troubled years leading to World War One, a time when, through the work of Freud, the emphasis was on regeneration and healing for the *individual*, rather than the community, brought about by a return to origins (or childhood) through psycho-analysis.

Secondly, and reinforcing this troubled aspect, we see the elders dressed in bear-skins enacting the ancestors of Man. The first performances followed in the aftermath of the recent outrage caused by Darwin’s ideas on Evolution and the shock of having to both recognise our close genetic links with the apes and to revise our estimate of the age of the earth as considerably older than we had believed from our former understanding of the Bible.

Thirdly, as we look back at *Le Sacre* in the light of recent neuroscience discoveries, we are beginning to understand how the work’s changing qualities of time can activate changing centres of attention in the brain. In Motion A the brain selects and groups overtones together in order to recognise *each* quality of timbre and keep each one separate. The independently unfolding instrumental lines of Motion A in the Introduction to Part One exploit the early functions of the auditory system and mimic the effect of hearing a multitude of individual creatures living close to the earth, in a very focussed “here and now”. The forceful, highly directed energy of Motion B stimulates the primary auditory areas of both temporal lobes, but particularly activates the left temporal lobe as *rhythmic* energy takes over as the predominant element. The sudden homogeneity of timbres, dynamics and textures emphasises its for-

ward momentum, while the subsequent conflict between metre and accents increases its power: metre and accents are processed by neurally separate areas of the left temporal lobe that are in strong competition with one another. This strong rhythmic pulse stimulates the parts of the brain concerned with *timing*, not only the substantia nigra and basal ganglia, but also the cerebellum, the oldest part of the brain. As they track the beat, timing and coordination of movements on stage, connections are made from these areas to the amygdala, frontal lobes, and other emotion processing areas.

With Movement types C and D, our attention shifts to the foreground elements of timbre and contour and the relationships between the movements of the distinct musical layers. These elements engage the processes of the right temporal lobe, and also neighbouring parietal lobe areas concerned with spatial movement. As our absorption in the timbral elements and spatial relationships that are of interest to the right temporal lobe increases, so our spatial sense is enlarged and our awareness of clock-time decreases towards an experience of timelessness.

After the sensuously Romantic indulgences of the late 19th century, the early 20th century saw Stravinsky pioneering a new awareness that music is essentially a temporal art, an art that can both bring us into a healing awareness of the changing temporalities of our existence and give us a glimpse of a timelessness that is beyond it. From *Petrushka* to *Le Sacre du Printemps*, Stravinsky begins to develop techniques for embodying his insights with respect to music and its relationship with time, and towards building a musical unity, based on a *dynamic* passage through time, that will echo in the soul. He described himself, not as a revolutionary, but rather as a “turning-around” point in the history of music, recapturing music’s ability to express our spiritual nature and our relationship with a creative power over and beyond ourselves.

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