

THE UNIVERSITY OF CHICAGO

TESSERACT, ACT I. FOR AMPLIFIED SOPRANO SAXOPHONE QUARTET AND OCTOPHONIC SPEAKER ARRAY

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE HUMANITIES
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF MUSIC

BY
RODRIGO BUSSAD CESAR

CHICAGO, ILLINOIS

JUNE 2022

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ACKNOWLEDGMENTS

This dissertation would not be what it is without the tireless help of my committee members: Augusta Read Thomas, Jennifer Iverson, and Michelle Lou. I cannot thank them enough for their patience and mentorship throughout the entire process. Each one of them had a crucial roll in the research method, and confection of the paper and score that this dissertation document is consisted of. I also would like to thank the committee of my minor field in Ethnomusicology: Philip V. Bohlman, Robert L. Kendrick, and Anthony Cheung. In the midst of the worldwide pandemic, they were incredibly generous with their time and inputs while I was conducting my field research in Brazil in 2020 in order to write my paper entitled "FOOTBALL IN BRAZIL AS A MUSIC CULTURE". Thank you to the whole faculty of the Music Department at the University of Chicago for the six years of incredible learning. I am thankful to the ~NOIS Saxophone Quartet for embarking this incredible and crazy journey with me. I also would like to thank my cohorts for their insightful presence in my life during my time here. A special and big THANK YOU to Maria Kaoutzani, and Darlene Castro Ortiz, your friendship and kindness were, in a lot of occasions, what kept me going forward.

I would like to dedicate this dissertation to my grandmother Olidia Bussad; I love you and miss you.

SCORE

Rodrigo Bussad

Tesseract, Act I.

For amplified soprano saxophone quartet and octophonic speaker array

(2022)

Rodrigo Bussad

Tesseract, Act I.

For amplified soprano saxophone quartet and octophonic speaker array
(2022)

Score in C

Foreword

TESSERACT, ACT I., my dissertation piece and research project at the University of Chicago, is a work for amplified soprano saxophone quartet and octophonic (8-channel) fixed media electronics. This work plays with spatial dimensions, imagination, and perception. The universe, as we know it, exists in three dimensions: height, length, and width. As tri-dimensional beings, we can only perceive dimensions equal to or below ours, like the two-dimensional x-y coordinate plane. But this limitation hasn't stopped humans from imagining dimensional universes with more than these three elements. The concept of the **fourth dimension**—a dimensional plane above ours and inaccessible from our tri-dimensional reality—for instance, was first published by French mathematician Jean le Rond d'Alembert in his book *Dimensions* (1754), and popularized by Carl Sagan on his television show *Cosmos: A Personal Voyage* (1980). During his explanation on the fourth dimension, Sagan summons the **Tesseract**¹. The TesserAct I. is a four-dimensional structure that exists only in the realm of possibility, thus its true form remains only a hypothesis. My work, TESSERACT, ACT I. is an attempt to sonically portray the idea of a hypercube, to build an aural Tesseract. The sound in this structure is designed to actuate the listener's inner ear perception, or psychoacoustic space of listening within an internal, subjective reality. The sounds' height, length, and width are used in such a way that allows a fourth sonic dimension to dynamically emerge as psychoacoustic phenomena, thus inviting the listener to play along with what belongs in the acoustic realm and what emerges within one's inner aural space.

TESSERACT, ACT I. is an attempt to alter a concrete physical space into an imagined and real aural space, revealing a sonic reality that may emerge both physically and metaphysically. Within the invisible, inner auditory layer of psychoacoustics, space and silence have equal weight. This allows physical performance space to become internally active within the ear/mind of the listener. Most importantly, the listener's motions throughout the space make its dimensions malleable, so that the listener's "when and where" dictate the sonic experience. The concept of building such an auditory space is by no means novel. Spatialized audio and psychoacoustic games, and can be found in the musical traditions of Japanese gagaku and Indonesian gamelan, for example. In contemporary Western music works such as *Kontakte* (1958-60) by Karlheinz Stockhausen, *Atmosphères* (1961) by Györgi Ligeti, and the grandiose *Prometeo* (1981-84) by Luigi Nono are canonic examples of how auditory effects can be explored with the combination of orchestras, electronics, and spatialized seating plans. Technologies used here in TESSERACT, ACT I., such as ambisonics and imaginary space creation are crucial in the fast-growing field of virtual reality (VR).

TESSERACT, ACT I. builds its space through invisible sonic lines projected by either acoustic instruments (four amplified saxophones) or by fixed-media electronics (projected via an array of eight speakers). These elements interact through a series of psychoacoustic phenomena, which provocatively destabilize the independent identity of any single element. Later movements of this work will explore additional spatial electronic music techniques further in-depth, using tools such as signal analysis and decomposition to more fully explore the theories of sound discussed below.

What happens inside of the TESSERACT, ACT I.. will be discovered by whomever ventures into it during this performance/installation. The listener will be invited to move around in the space while listening, thus becoming

¹ The TesserAct I.n Physics is portrayed by a hypercube, which is a visual representation of two tri-dimensional cubes drawn in a bi-dimensional x-y coordinate plane.

a living part of the performance experience. The piece shortens the barrier between where the sound is produced and where it is perceived, thus enabling a mode of active listening, where the listener becomes an important element of the work. As such, this work expands several horizons simultaneously: what a saxophone quartet can do instrumentally; how fixed media electronics can be spatially deployed; and most importantly, how the listener's inner perception can become a crucial filter for the living work. This piece brings creative concepts and innovative theories from scientific, perceptual research into the aesthetic space of musical creation. Above all things, *TESSERACT, ACT I.*, promotes an immersive, sensorial, and extremely playful experience to the interactive audience.

The following text delves into the theory behind the psychoacoustic and ambisonics concepts used to compose this work. A detailed roadmap of the form of the piece (TABLE 1) follows. Finally, this document closes with detailed performance notes where the technical set-up instructions of the work are provided with additional commentary. When the score is published, the crucial technical instructions will move here, after the foreword, and remain with the score.

Auditory Scene Analysis (ASA)

This dissertation project is heavily based on Auditory Scene Analysis² (ASA), a term coined by psychologist Albert Bregman and published his well-regarded book in 1990. Auditory Scene Analysis is, very broadly speaking, the study of the perceptual organization of sound, organizing listening into two categories: Analytic and Synthetic. In the **analytic listening** mode one can identify (conscious, that is cognitive) the harmonic spectrum of a pitch. When a single pitch rings, other sympathetic pitches are activated to create the harmonic spectrum. These sympathetic pitches are all proportional to the fundamental frequency of the single pitch. For example: if one of the tones is 1046.50 Hz one's ears can analyze it as the thirty-second partial of 16.35 Hz (C₀). By applying special techniques to the saxophone, or an oscillator to a pure sine tone, the same C₆ is now slightly flattened and could also be associated as a flat seventh partial (in this case the 18th partial) of a hypothetical 18.35 Hz (D₀). What if the two C₆'s are ringing at the same time? What if the result is a "false impression" of a lower frequency emerging from the 2 Hz difference between the two hypothetical fundamentals? What if I then modulate this new pitch by adding noise to its source?

With these questions I enter into the holistic characteristics of a tone (sub-conscious, perceptual), which, according to Bregman, is defined as **synthetic listening**. According Stanford University's CCRMA: Center for Computer Research in Music and Acoustics, on the article ASA 25³: "Analytic versus Synthetic Pitch. Description: Our auditory system has the ability to listen to complex sounds in different modes. When we listen analytically, we hear the different frequency components separately; when we listen synthetically or holistically, we focus on the whole sound and pay little attention to its components."

The sound experiment proposed by G.F.Smoorenburg (1970) in his work "Pitch perception of two-frequency stimuli," exemplifies the different experiences that listeners can have while "a two-tone complex of 800 and 1000 Hz is followed by one of 750 and 1000 Hz. If you listen analytically, you will hear one partial go down in pitch; if you listen synthetically you will hear the pitch of the missing fundamental go up in pitch (a major third, from 200 to 250 Hz)." *J. Acoust. Soc. Am.* 98, 924-942.

Before continuing, I ask the reader now to take a while and listen to the audio file below.

² Bregman, Albert S. 1996. Auditory scene analysis. MIT Press.

³ Online source: <https://ccrma.stanford.edu/~malcolm/correlograms/index.html?48%20Analytic%20Vs%20Synthetic%20Pitch.html>

Figure 1 – Analytic Vs. Synthetic Listening



Following the concepts within ASA’s analytic and synthetic processes in which auditory attention happens, Bregman divides attention into two modes: voluntary (cognitive) and involuntary (subconscious). I have translated these modes into the following table of musical material:

Figure 2 – Voluntary Vs. Involuntary Attention

Voluntary Auditory Attention	Involuntary Auditory Attention
Pitch	Critical Bandwidth
Tessiture	"Busy-ness" of sonic texture
Intensity (Physical)	Loudness (Perceptual)
Timbre Modulation	Auditory Masking
Attention vs. Time	Attention vs. Time
Filtering	Continuity Illusion

According to Bregman, our auditory attention is inversely related to time (meaning the more the time over the same stimulus, the less attention the brain will dedicate to the former), and can process a limited amount of inputs at the same time, thus meaning that the more a sound is iterated or sustained, the less attention our auditory perception will reserve for that stimulus.

For me, auditory attention fits both the voluntary and involuntary attention columns of TABLE 1, because its perception over time relates individually to each listener’s experience during the performance of the work. Also, this simple concept can be used in interesting ways, such as juxtaposing several layers of sonic material over different scopes of lengths. This creates a structure of "auditory attention dynamics," in the same way that our ears are immediately drawn to louder volumes rather than softer ones. The second to last section of the work (R.L. U) is a good example of attention versus time and where I expect a part of the audience to activate the analytic while the other sum the synthetic auditory modes. The section is composed of an “exhausting” and descending flux of microtones in the saxophones being juxtaposed by a sequence of accentuated sound bursts in the electronics which will gradually modulate itself as to become a shadow of the microtonal cascade in the saxophones, becoming a mirage of the latter.

Informed by these basic concepts of ASA, TESSERACT, ACT I. renders a playful stimulation of both cognitive and perceptual. The goal is that by dislocating themselves or just turning their heads left and right, the listeners inside this sonic structure can freely play with the acoustic differences between two or more sonic phenomena happening at the same moment in the space surrounding as in the individual inner ear. As previously mentioned, TESSERACT, ACT I. plays in particular with several concepts of cognitive perception and psychoacoustics, which I will now define and explain. The sonic samples provided in this dissertation elaborate the continuity illusion, critical bandwidth, and auditory masking.

Continuity illusion is generated when there is the impression that a sound is continuously produced by the same sound source, even though it is being produced by a different source. A way to achieve this effect is by applying a transient (attack) and/or a white noise source to the primary source while shifting the “continued” sound to the secondary one, misleading the ear apparatus and thus providing a fake impression of limitless continuity. This idea has much to do with the physical direction of the primary source in the space it inhabits, which can also provoke interesting reactions in the listener's ears. In *TESSERACT, ACT I.*, I conveyed this effect via the juxtaposition of artificial sine tones to the ones produced by the saxophones. The material in Rehearsal Letter A (R.L. A) is actually based on playing with the idea of continuity Illusion, where the saxophones fade out, the sine tones continue, coming from a different point in space. The concepts behind the process of composition for this section were: frequency proximity, spectral similarity, and correlations of the changes in acoustic properties. Figure 3 provides a recording example from a previous version of the work (2017). The psychoacoustic phenomenon is surely improved perceived during a live performance of the work, since listening with headphones collapses and flattens the sonic space into two dimensions (LEFT/RIGHT).

Figure 3 – Tesseract, Continuum (ver. 2017)



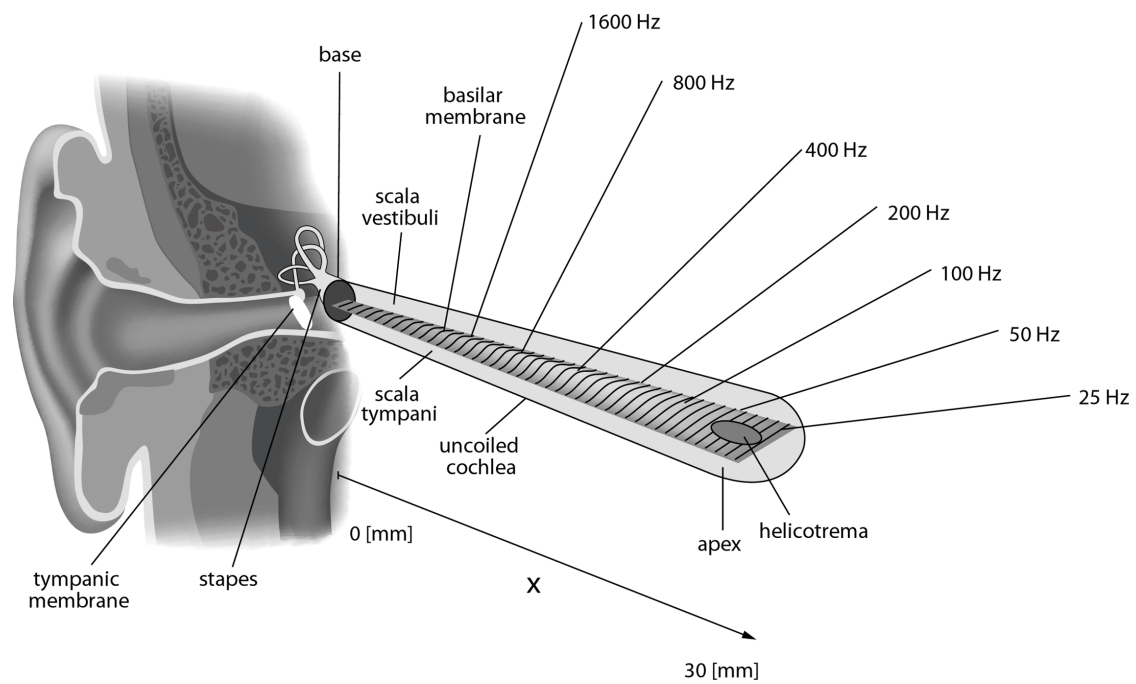
The concept of **Critical Bandwidth (C.B.)**, coined by American physicist Harvey Fletcher in 1933, an alumnus of the University of Chicago, describes how the human ear and brain process tones. In broader terms, C.B. is the difference in frequency between two sine tones, which happens in the inner ear of the subject, stimulating the basilar membrane, in which the sensation of roughness disappears and the tones sound "smooth". This "sweet spot" within the basilar membrane is called the critical band. A byproduct of two tones existing within the critical band is **beating**. The phenomenon of “beating” is an acoustic one, meaning that happens while sound is travelling in the air. It can be explained by the conflicting partials of two sounds. The experience of beating, depending upon critical bandwidth and perception, needs a clearer definition of human body architecture and behavior.

During the performance of *TESSERACT, ACT I.*, although I set the stage for beating to happen by clashing close frequencies against each other, it will depend of the listener’s ears position over the length of the work for it to be perceived or not. The psychoacoustic phenomenon of "roughness", "smoothness" or "beating" happens in the inner ear of the subject, stimulating the basilar membrane. With that in mind while composing I expect for the attentive listener to start to intuitively “scavenge” for beating by slightly tilting ones ears. This is one solid example of the type of active listening I propose with this work.

According to the book *Hearing: an Introduction to Psychological and Physiological Acoustics*⁴ (1998) by Stanley A. Gelfand, the basilar membrane, which is located within the cochlea, is thinner and stiffer in its outside edge (closer to the sound source) and it processes higher frequencies. The inner region of the membrane, the "apex", is more elastic and is activated by lower frequencies.

⁴ Gelfand, Stanley A. 2017. *Hearing: an Introduction to Psychological and Physiological Acoustics, Sixth Edition.*

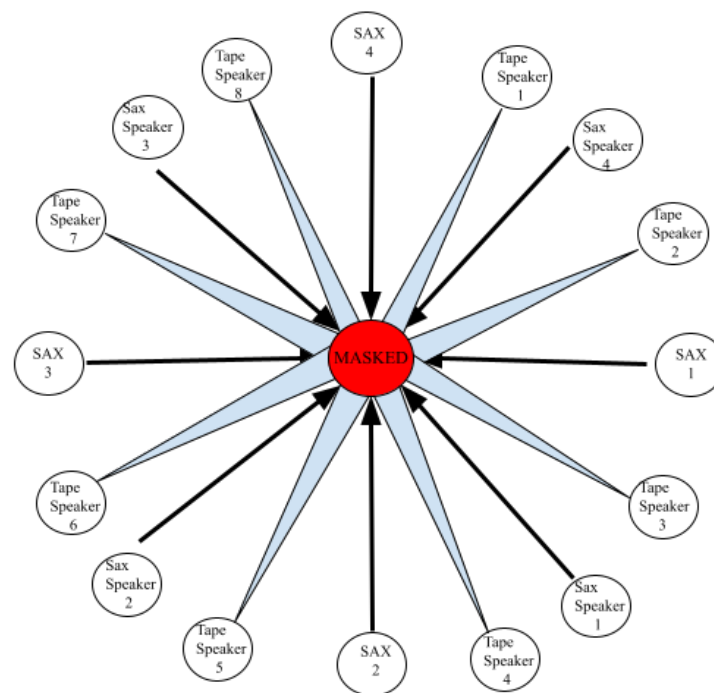
Figure 4 – Basilar Membrane



When the basilar membrane cannot resolve the difference between the two inputs. The ability of the ear to process and hear two distinct frequencies is known as frequency selectivity, thus the critical band happens exactly when the brain understands two frequencies as one, where the second tone will interfere with the perception of the first tone. **Auditory Masking** occurs right at the boundary of frequency selectivity and in the axis of time since the original signal needs to exist first to "be masked" by a second. This all happens in the auditory filters located within the inner ear. The masking signal (second frequency) should always be louder than the original signal (first frequency). Masking will occur more successfully between two signals of the same frequency. There are two types of masking that I use in the work: Masking of a tone-by-a-tone and Masking by-noise. Taking in consideration that masking of tone-by-tone is more complicated to achieve than by noise, masking of a tone-by-a-tone is more pronounced at higher frequencies, Masking increases proportionally with the masker level at high frequencies. In TESSERACT, ACT I., masking of a tone-by-a-tone happens frequently in section A when the first frequency of 1046.50 Hz will be masked by the second one, which is slightly flattened if the second one is higher in volume. Masking here happens because the sine tones are processed in the same region of the basilar membrane.

One place in the work where masking-by-noise is used is in mm. 299-308, approx. 34 seconds of duration. Tape speakers 1-8 gradually emit a continuous white noise signal (starting at m.332) that will completely mask saxophones 1-4 playing *forte* at a continuous tone of 1046.502 Hz (C6). Figure 5 represents visually what will happen in these measures of the piece.

Figure 5 – Masking Effect Diagram 1

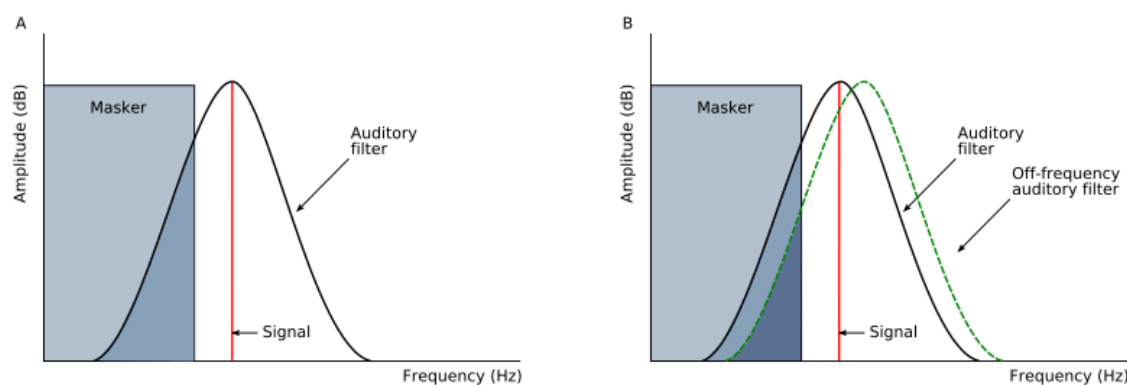


For more of the theory behind “masking-by-noise” I bring some of my notes taken from Prof. Dr. –Ing. Bernhard U. Seeber’s master class entitled “Psychoacoustics (s): Masking By Noise”⁵, taught at the Technical University of Munich (2020). Recalling here that masking operates in the hearing threshold within the cochlea, for that reason auditory filters are closely associated with masking.

The section of the work described above was based in the graphic shown in Figure 6: Equivalent Rectangular Bandwidth (ERB)

- C.B. of the filter increases in size with increasing frequency also the filter itself becomes more asymmetrical with increasing level.
- Lower Frequencies will mask higher frequencies more effectively than the contrary.
- Masking is also proportional to volume.

Figure 6 – Masking Effect Diagram 2



Ambisonics⁶

When it comes to creating psychoacoustic effects in sound, spatial audio bears incredible potential. First, a brief history⁷, and definition of Ambisonics. The pioneering British engineer Michael Gerzon at Oxford University developed Ambisonics in the 1970’s. As Daniel Arteaga covers on his article Introduction to Ambisonics (2018) “Although hardware Ambisonic systems were soon developed, they were never a commercial success. However, Ambisonics has many nice features and has attracted the interests of researchers in spatial audio since the early beginning. In the 90s, the theory for higher Order Ambisonics was developed. In the academic environment, Ambisonics is still nowadays a topic of research”.

Ambisonics framework is to capture, represent and manipulate spatial acoustics, based on physical principles of the acoustic field. The concept being a full-sphere of surround sound; where all speakers are equivalent in amplitude from the center of the sphere (Isotropic). Because ambisonics operates in B-format (speaker independency), it makes the spatial recording, as well as the editing/mixing processes the ultimate playback format for both spatial and non-spatial audio recordings.

Ambisonics B-Format (Spherical Harmonics)

- Spatial information is represented in B-format.
- In Ambisonics, editing/mixing is done in B-format (the complexity of B-format is hidden)

⁵ My notes were taken on November 1st, 2020 while watching the lecture master class “Psychoacoustics (s): Masking By Noise” recorded on January 27th, 2020. Available on youtube: <https://www.youtube.com/watch?v=R9UZnMsm9o8&t>

⁶ My notes were taken on September 27th, 2021 while watching the webinar “Ambisonics Elements” recorded on June 10th, 2020 and lectured by Leonard Moskowitz: <https://www.youtube.com/watch?v=TT726EBb1B0>

⁷ Arteaga, Daniel. (2015). Introduction to Ambisonics. Preliminary version of some lecture notes on Ambisonics. 4.

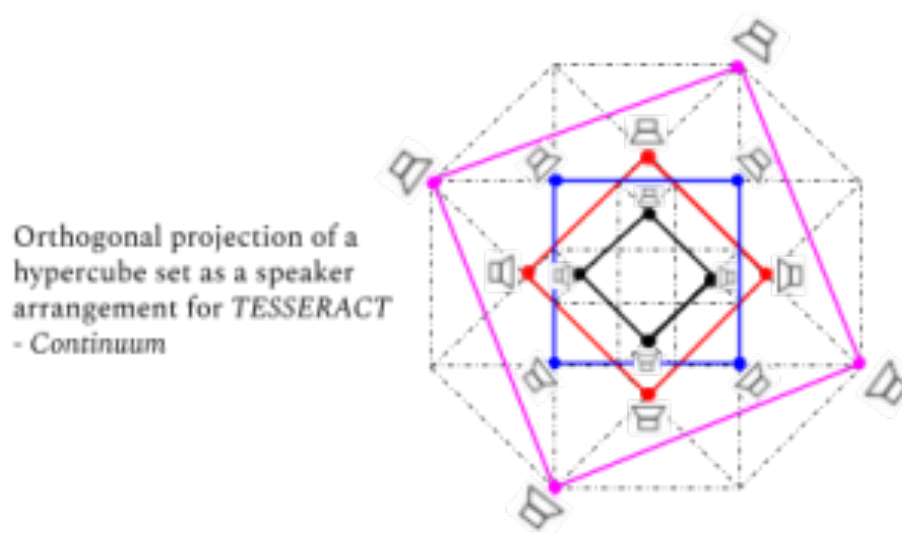
- The tridimensional speaker arrangements in Ambisonics work in quantitatively and is expressed by the term “order”, whereas the higher the “order”, the better will be the spatial resolution. The number of “orders” goes up to seven (64 channels).
- First-order B-Format has 4 channels of loudspeakers
- Second-order B-Format has 9 channels of loudspeakers (8+1)
- Third-order B-Format has 16 channels of loudspeakers

Because Ambisonics works with sound direction, the complexity of B-format grants the engineer sonic precision (in space) from the speakers. As Arteaga follows in his collaboration in the article: Subjective Evaluation of the Localization Performance of the Spherical Wavelet Format Compared to Ambisonics⁸ (2021), “A common goal of most spatial audio techniques is to reproduce the precise location and size of sound sources. Ambisonics is a well-established spatial audio technique that renders sound sources with increasing accuracy as the Ambisonics’ order increases.”

TESSERACT, ACT I. works in a third-order B-format of Ambisonics, which is considered the minimum for an immersive speaker array playback. The spatialization of the sound is perhaps the most important element in TESSERACT, ACT I., which I imagine being realized in two ways: a live performance with the quartet being part of the spatialization component (orthogonal projection diagram) and also as a sound installation where the pre-recorded saxophone tracks would be played through an extra set of speakers. In both ways the quartet is perceived as a set of four equidistant sound sources in space (a sonic square), and together with three more sets of squares formed by additional speakers, I can achieve a set of four quadraphonic systems, not equidistant with one another, being only equidistant among its related pairs, thus portraying in the clearest way possible, a sonic image of a hypercube.

Through an orthogonal projection seen from above, a **quadraphonic system diagram** is generated. The hypothetical hypercube, which exists in a plane superior to ours (represented by P), generates a series of vertices in which the sum of them becomes a bi-dimensional projection of its source (P'), where P' consists of all the vertices I chose (represented by dots.) These vertices are, in practical terms, where the sound sources will be placed in space (speakers and/or saxophones). The image below in Figure 7 represents how I picture such an arrangement:

Figure 7 – Orthogonal Projection of a Hypercube



⁸ Eguinoa, Ruben, Ricardo San Martin, Daniel Arteaga, and Davide Scaini. 2021. "Subjective Evaluation of the Localization Performance of the Spherical Wavelet Format Compared to Ambisonics". 1-8.

In the diagram, the **black square** is where the saxophone quartet musicians would stand, while the **blue square** is where the speakers that are amplifying the saxophones are placed. These speakers would ideally be set in an array above and below the ground level and pointed at a 45° angle towards the ground floor, promoting a further and more complex spatialization where auditory masking happens more effectively. The same principle is applied to the electronics track. The **red square** is the set of speakers that will play the electronic track, while the **pink square** is where the subwoofers will be placed. The subwoofers will be suspended from the ground level (to avoid the "coupling effect"-- an unwanted increase in volume) and set below the surface level (within the hollow created by the suspended floor). Since low frequencies travel through the air in a spherical shape, there is no need to point the subwoofers toward a specific point in space. In the case of a sound installation, the saxophones would be replaced by a set of smaller (up to 5") speakers. Since multiple "sonic hot-spots" can be found within the hypercube, the audience should experience this sitting still in one place for a certain amount of time and then venturing to other points within the complex set of speakers.

Although I am also working on more feasible solutions to an actual performance of the piece, the ideal place for this setup of speakers would be one that provides a suspended floor, where some of the subwoofers and speakers could sit beneath. With this, a real three-dimensional arrangement of sonic sources could be achieved. Such spaces do exist in North America. I have visited one of these spaces, the semi-anechoic chamber [listening room](#) at CCRMA Stanford (Stanford University). In Chicago, a permanent ambisonic playback system can be found at [Threshold Auralization Studio](#), and another examples of possible spaces include [The Cube](#), located at the Virginia Tech Institute For Creativity, Arts, and Technology. Currently, in my research on sound spatialization, I am studying more in-depth the dissertation on **Vector Base Amplitude Panning (VBAP)**, by Finnish audio researcher Ville T. Pulkki, professor of Aalto University (2015-.) According to his website VBAP "is a method for positioning virtual sources to arbitrary directions using a setup of multiple loudspeakers. In VBAP the number of loudspeakers can be arbitrary, and they can be positioned in an arbitrary 2-D or 3-D setup. VBAP produces virtual sources that are as sharp as is possible with current loudspeaker configuration and amplitude panning methods, since it uses at one time the minimum number of loudspeakers needed, one, two, or three."

Working together with the potentialities of spatial audio, I have striven to create psychoacoustic phenomena within the Ambisonics realm, which deals with the precise location of sound, (like continuity illusion and beating) that are also spatialized. These are understood as auditory illusions, which is when the listener is influenced to incorrectly localize a sound. One example of this is the Hass Effect.

Precedence Effect or Hass Effect

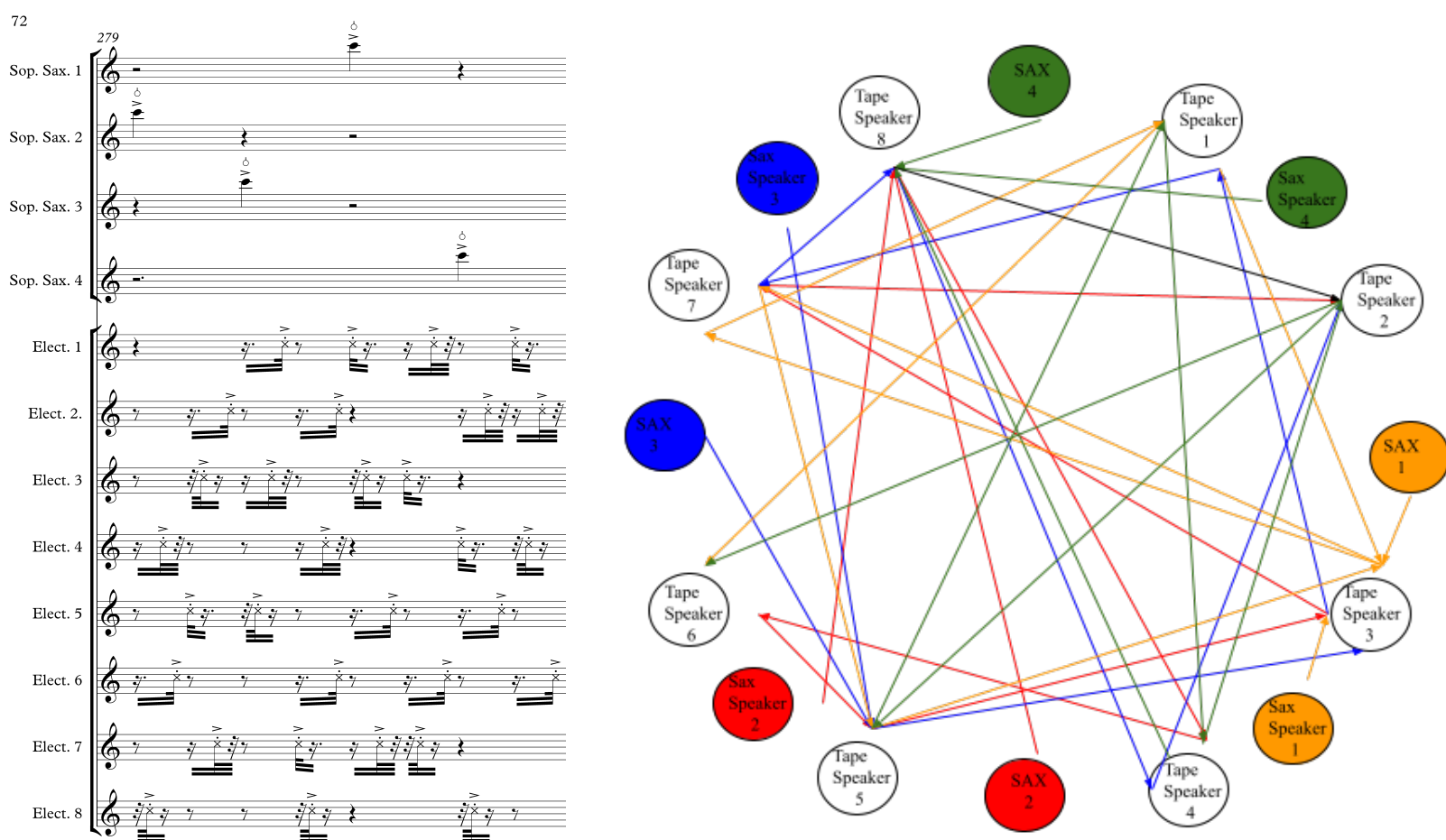
The name of this binaural auditory illusion derives from a paper⁹ written by Helmut Hass (1951). It occurs by a delay in one of the sound sources (a high transient sound). As professor [Leonard Moskowitz](#) describes in his master class, This delay will happen below the listener's threshold of processing. (Delays below 2 milliseconds – 100 milliseconds.) The listener will pursue the source of the sound coming from the first signal (S) but one or more consecutive sounds can be added to other speakers below the threshold earlier cited. Naturally the "Hass effect" will work with high transient sounds (in the case of saxophones, a slap tongue for example.) At 2ms the sounds are perceived as one source. Anything closer to 100ms or above and the listener will start spotting the echoing of the

⁹ Haas, H. (1951). "Über den Einfluss eines Einfachechos auf die Hørsamkeit von Sprache," *Acustica*, 1, 49–58.

source's location elsewhere. At 50 milliseconds impulse signals: for signals with constant amplitude this can go up to the 1 sec.-2sec. range.

In TESSERACT, ACT I. works to recreate the psychoacoustic phenomena described above the compositional process of the work was based on the idea of creating sonic vectors that over the axis of time will cover the virtual space projected by the speakers. This occurs in Figure 8 (m. 279, approx.4 seconds of duration) the graphic demonstrates the sonic vectors (in colors) operating over time in order to achieve the Haas Effect between saxophone 1 to 4 and speakers 1 to 8.

Figure 8 – Haas Effect Diagram



Franssen Effect

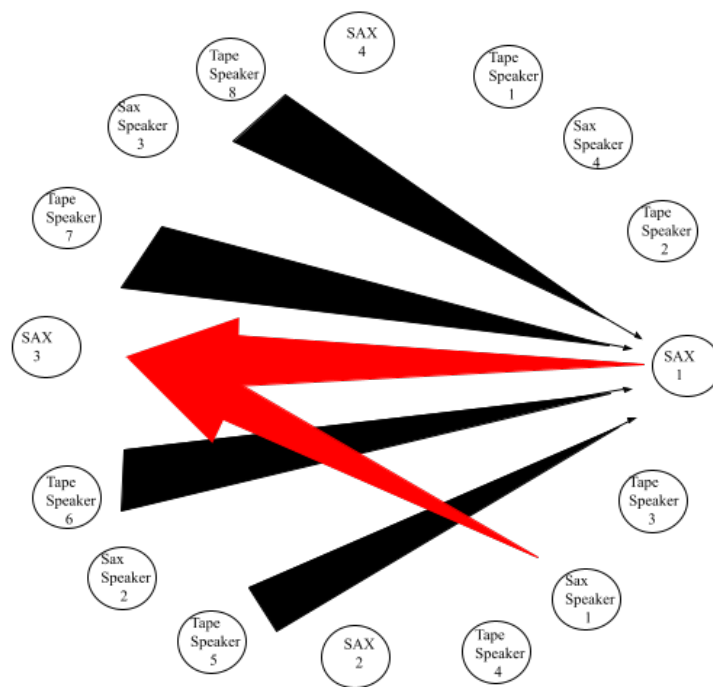
Finally, another illusion that I create in TESSERACT, ACT I. is the Franssen Effect. Written by N.V. Franssen, the book *Stereophony*¹⁰ (1964) proposes a psychoacoustic experiment named by the author as the Franssen Effect Illusion, or just Franssen Effect. As in the Haas effect, the Franssen effect is an auditory illusion where the listener located in the space between two or more equidistant sound sources will incorrectly locate the source of a sound. It is divided into two effects possible: Franssen Effect 1 (F.E.1): As a sustained tone in the left speaker (L) decreases (volume) exponentially over time, a same sustained tone, which always will come slightly later than the original source, in right speaker (R) increases in volume until it becomes the main source of sound. The illusion occurs when the listener will still perceive the sound source coming from the left (L) speaker. Franssen Effect 2 (F.E.2): Consists basically of the same process with the only difference is that in Franssen 2 (F.E.2) the auditory illusion will start with one of the speakers generating a steep slope (high transient) attack while right after remaining constant, where the process described in Franssen 1 (F.E.1): starts.

¹⁰ Franssen, N. V. 1964. *Stereophony*. Eindhoven: Philips' Gloeilampenfabrieken, Distributors Cleaver-Hume Press, London].

In the book *Hearing: An Introduction to Psychological and Physiological Acoustics* (1998), Gelfand points out that this illusion fails to succeed when in a space with close-to-none reflections. Interestingly, Hartmann and Rakerd (1989) showed that the Franssen effect fails to occur when the environment is anechoic (echo free), and explained the illusion based on the plausibility hypothesis” (p.246). This piece of information has alerted me during the crafting of the piece since it is very unlikely that this effect will work in rooms that are extremely “dead”.

In Figure 9 (R.L. I, mm. 151 - 155) the graphic demonstrates the sonic vectors (in colors) operating over time in order to achieve the Franssen Effect 1 between saxophone 1 and speakers 5 to 8. Here the multiphonic composed of four pitches will gradually pass from the speakers to the saxophone. The thickness of the arrows (black and red) represents the dynamic level over the time axis (approx. 15 seconds.)

Figure 9 – Franssen Effect Diagram



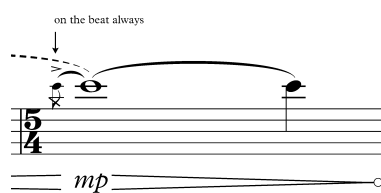
I’ll conclude the discussion with performance notes; as you can see, some of these will eventually become part of the published score’s preface, to aid in technical set up and performer instruction. Here, my treatment of technological affordances gestures toward the way the piece’s sounds were collaboratively shaped with technologies.

Performance Notes:

Saxophones

The score is in concert pitch C.

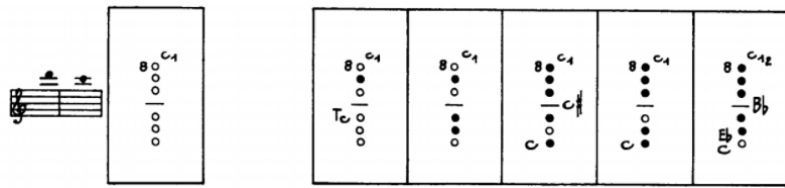
All grace notes are to be performed on the beat. A downward arrow will indicate its entrance.



Accidentals

Unless specified the contrary in the score, for every section of the work where there are two or more players performing a same sustained pitch, as a rule, each ensemble member needs to choose different fingering solutions

for this pitch. The book “The Techniques of Saxophone Playing” (Weiss, Marcus / Netti, Giorgio. 2010), the work *necessità d’interrogare il cielo* (Netti, Giorgio. 1996/1999), and collaborative research with Chicago based artist Jordan Luloff (~Nois Saxophone Quartet) were used as principal references in the saxophone writing in the piece. The saxophone fingering diagrams for all multiphonics present in the work are provided in the individual parts with a reference number when available.



In TESSERACT, ACT I. saxophones operate up to 1/8th of a tone. The following list provides the inflections (in cents) expected for each microtonal accidental¹¹:

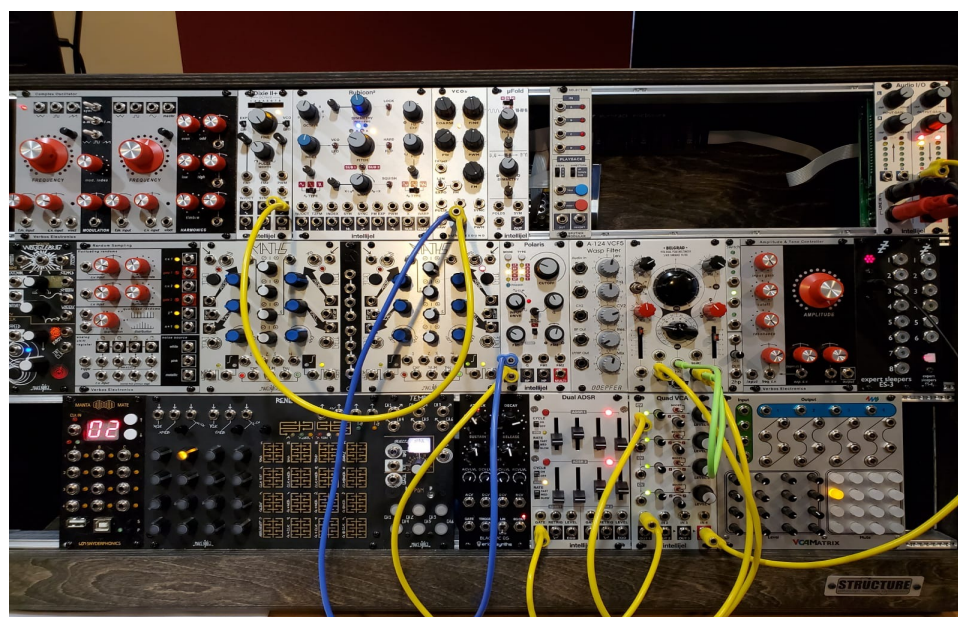
- ↑↓ sharpened/lowered by an eight-note (+-25 cents)
- ‡‡ sharpened/lowered by a quarter-note (+- 50 cents)
- ♯♭ sharpened/lowered by a half-step (+- 100 cents)

Electronics

Synthesizer

The electronics for the recorded sample were created on the modular analog synthesizer and well using the VCV Rack 2 application (which is based on the euro-rack analog synthesizer), where I produced sine tones of the exact frequency as the tones provided by the sound samples I collected from the saxophone quartet previously. For the piece, I used alternate fingerings for all of the tones, which have a very particular microtonal nature to them. These alternate fingerings, together with the micro inflections they may or not produce, are all provided in the score:

After producing all of the sine tones (C₃ to C₆) on the synthesizer, I apply a series of filters; oscillators and envelope-shapers to create patches and alter these newly collected sounds, aiming to produce all the above-discussed sonic phenomena. The photo below shows one of the patches I built during the process at the analog synthesizer in CHIME Studio:



¹¹ Eight-note inflections can be added to both quarter-note and half-step accidentals.

I have also produced a catalog of qualities for each of the tones from the saxophone, using ASA's synthetic listening concept, looking for the holistic properties of these tones. These are some of my notes taken during the process:

The blue, orange, and red highlights catalog the tones from most to least stable, respectively.

C6

C6 -1: S.U. (fast microtonal beating), overtone prowess

C6- 2: S.U., similar to C6-1 but somewhat darker in timbre

C6-3: U.U., overtone prowess

C6-4: S.U, beautiful extremely fast and controlled beating, less overtone prowess

C6-5: E.U., with a 4th (F) that rings above and a **beautiful** subtone.

C6- 6: U.U, with a fast beating that comes and goes.

C6-7: S.U., with an extreme fast beating

C6-8: U.U., nice color

C6-9: U.U., with a strange mid tone

Volume Measurement

Musical scores are typically marked with dynamic markings to suggest the relative loudness for various parts of the score. While there is no precise standard for the meaning of these dynamic levels, the following table contains a general framework of suggested measured values associated with dynamic markings. It is taken from Backus. Note that the table contains comparisons of decibel levels for the same perceived loudness at relatively high and low pitches. By examining those levels you can see that the relative intensity levels in decibels of low-pitched sounds must be increased for soft dynamic levels. That is, you have to boost the bass more for soft sounds. This is a result of the ear's progressive discrimination against bass for soft sounds. The dynamic levels are also listed in the units' phons and sones, which are units designed to measure the perceived loudness by the normal human ear. The dynamic levels for the speakers in the score are notated as in for an acoustic instrument, from *piano* to *forte* and its varieties in between and beyond. Although the dynamic levels of the tape file were designed for the distance of $r = 4$ meters from the center of the speaker array it is recommended that a new level automation is made for every room a new performance of TESSERACT, ACT I. takes place.

The table ¹² headed "Multiple of Threshold" gives the multiple of the standard threshold of hearing for a 1000Hz¹³ tone. This table should be used as a parameter for the volume measurement of a performance of the work.

Multiple of Treshold (Dynamic levels measured in decibels)

Dynamic Level	Decibels at C ₆ (1024 Hz)	Multiple of Threshold	Decibels at A ₁ (55 Hz)	Phons	Sones
Threshold of pain	120	10 ¹²	130 10 x I _C *	120	256
fff	100	10 ¹⁰	113	100	64

¹² This text and table were taken from <http://hyperphysics.phy-astr.gsu.edu/>

¹³ Multiple of the required level IC at C₆(1024 Hz). TESSERACT, ACT I. work with C6 at 1046.502Hz.

			$20 \times I_C^*$		
f	80	10^8	93 $20 \times I_C^*$	80	16
p	60	10^6	79 $80 \times I_C^*$	60	4
ppp	40	10^4	63 $200 \times I_C^*$	40	1
Threshold of hearing	0	1	40 $10,000 \times I_C^*$	0	...

The download link for the tape file as well the click track (.rpp) of the work can be found at:

<https://www.rodri gobussad.com/music>

Stage Diagram, Speaker Array, Gear Inventory and Installation Diagram

DAW: Reaper (latest version is recommended). Free download at: <https://www.reaper.fm/download.php>

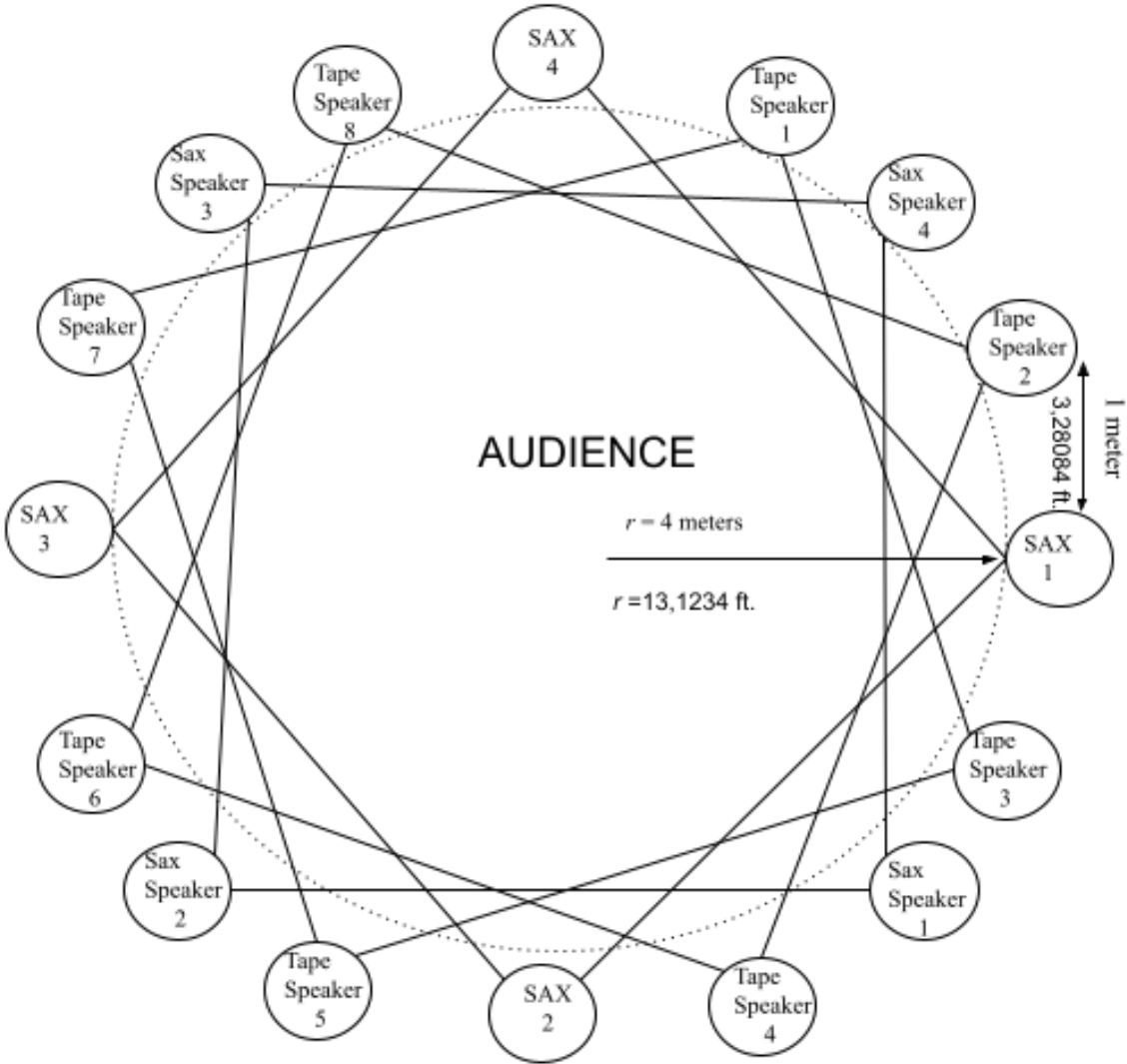
Interface: An audio interface or mixing board (with a USB connection) with 4 – input and 16 – output channels is required.

Microphones: four condensed microphones are necessary. The nature of the microphone can vary from a small capsule to a lava microphone to be attached at the bell of the instrument.

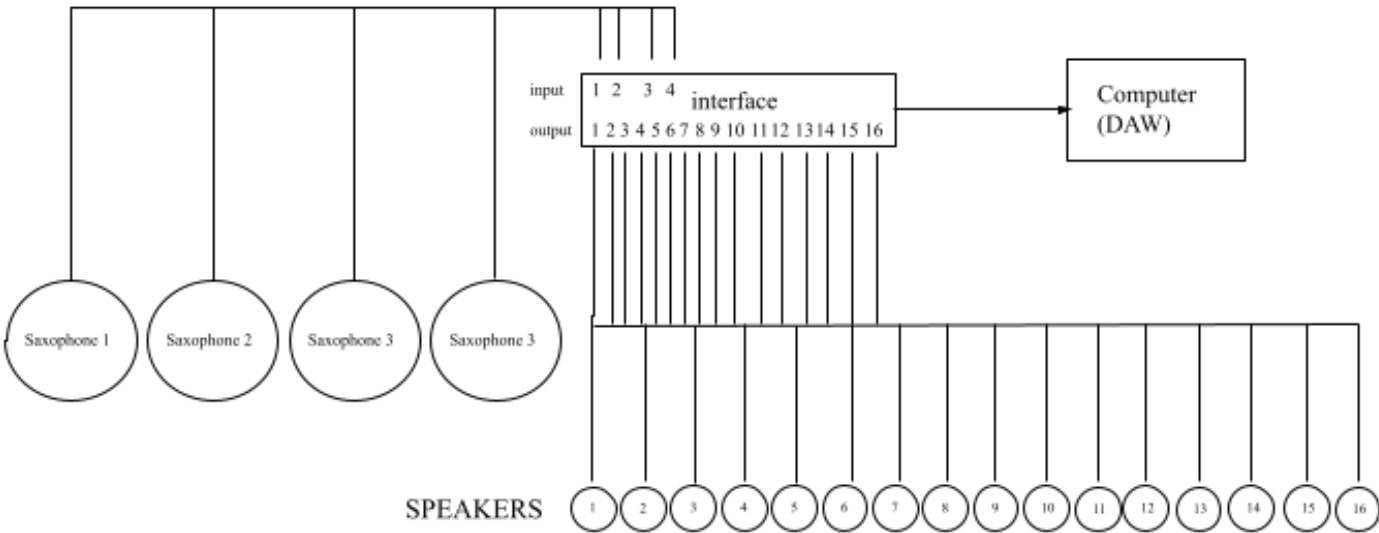
Speakers: This piece requires a number of 12 amplified loudspeakers (audio monitors) that must be equal in model and size. It is recommended for the speaker's size to be of 5 inches (fq. range of 50 Hz to 20 kHz). 8 inches (or more) speakers will also work, but nothing less than 5 inches is recommended. The speakers, together with the saxophones line up must be equally distant from one another, as well in an equal height as showed in diagram 1.1. The measurement chart is provided in the Speaker Array Diagram. Thinking of the availability of the performance for this work, the following Speaker array setup is also provided. In this diagram the orthogonal projection designed for *TESSERACT, ACT I., ACT I.* is provided.

Speaker Array Diagram

Total diameter: 26,2467 ft. / 8 m
 Speaker/Saxophone distance: 3,28084ft. / 1 m
 Speaker/Saxophone height: 5,24934ft. /160 cm



Signal Path and Installation setup diagram



TESSERACT, Act I.'s SECTION MAP

	Intro	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
								*						*							*			**
														*							*			**
Length	04'00"	02'27"	01'15"	01'58"	02'39"	01'38"	01'15"	01'51"	02'51"	04'08"	01'00"	05'03"	01'15"	00'57"	01'15"	01'06"	01'15"	01'37"	01'33"	01'15"	04'04"	04'57"	00'34"	01'15"
Material	Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	S. Quartet/ Electronics	Electronics
Psychoacoustic s																								
Continuity Illusion																								
Beating																								
Auditory Masking																								
Envelope Transformation																								
Haas Effect																								
Franssen Effect 1&2																								

G: Sleek/Ridged Time/Space (temps doux et strié, term coined by Boulez's in Musique Aujourd'hui. Paris. Gallimard, 1963.)

M: Amplitude Equanimity between saxophones and electronics.

T: Shepard Tone also happening in both saxophones and electronics.

W: Octophonic Spatialization in the electronics, which will be the compositional material of TESERACT ACT 2, which will be purely composed by the electronics part.

TESSERACT

Act I

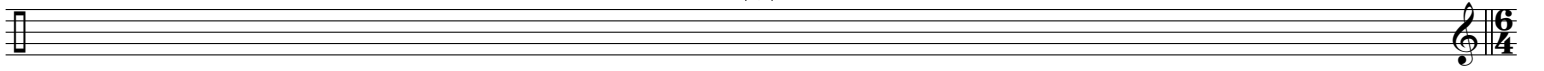
for amplified soprano saxophone quartet and octophonic speaker array

Electronics Intro

Rodrigo Bussad (b.1985)

04'00"

Soprano Saxophone 1



A ♩=60 (the second)
Entrance at 04'01"

1

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

p

mp

sub. p

on the beat always

6

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

(+25 -25 0)

on the beat always

p

sub. p = molto

p *> < p* *p*

mp *f*

mp

p *> < p* *f* *f*

p *f* *f*

p *mp*

p *mp* *f*

p *p* *p*

12 *p gentile* (p) *add undertone* *on the beat always*

Sop. Sax. 1

Sop. Sax. 2 *p* **71**

Sop. Sax. 3 *p* *p gentile* *add undertone*

Sop. Sax. 4 *p* **71** *p*

Elect. 1 *mf* *mf* *sub. mf* *sub. mp* *p*

Elect. 2 *mp* *mp* *p*

Elect. 3 *f* *mp* *mp* *p*

Elect. 4 *mf* *mf* *sub. p* *mp* *mp* *p*

Elect. 5 *mf* *mf* *sub. mf* *mp* *mp* *p*

Elect. 6 *p* *f* *mp* *mp*

Elect. 7 *mf* *mp* *p*

Elect. 8 *mf* *sub. mf* *sub. mp* *p*

18 21

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

ppp

p

ppp

ppp

This musical score is for a section of ten instruments: four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The score is written in treble clef with a key signature of one sharp (F#) and a time signature of 5/4. The piece is divided into three measures. The first measure (measures 18-20) is in 5/4 time, and the second measure (measures 21-22) is in 4/4 time. The final measure (measure 23) is in 2/4 time. The Soprano Saxophones play a melodic line with long, sweeping phrases, often marked with a *ppp* dynamic. The Electric Instruments provide accompaniment, with some playing sustained notes and others playing more rhythmic patterns. The score includes various musical notations such as slurs, ties, and dynamic markings.

21

Sop. Sax. 1 *mp*

Sop. Sax. 2 *mp*

Sop. Sax. 3 *mp*

Sop. Sax. 4 *mp*

Elect. 1 *f p f p*

Elect. 2 *mp p f sub. p*

Elect. 3 *mp p f sub. p*

Elect. 4 *mp p f sub. p*

Elect. 5 *mp p f sub. p*

Elect. 6 *mp p f sub. p f*

Elect. 7 *mp p f sub. p f*

Elect. 8 *f p f p*

Detailed description of the musical score: The score is for page 22 of a piece, starting at measure 21. It features four Soprano Saxophone parts (Sop. Sax. 1-4) and eight Electric Instrument parts (Elect. 1-8). The time signature is 2/4, and the key signature has one flat. The Soprano Saxophone parts are marked *mp* and feature long, sweeping phrasing slurs across measures. The Electric Instrument parts are more rhythmically active, with dynamic markings ranging from *mp* to *f*, including *p* and *sub. p*. Some parts include accents and phrasing slurs. The overall texture is a blend of sustained saxophone tones and more rhythmic electric instrument accompaniment.

26

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

71

f

p

mp

This musical score page contains ten staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4), and the bottom six are for Electric Instruments (Elect. 1-8). The music is written in treble clef with a 4/4 time signature. The score is divided into four measures with time signatures 4/4, 3/4, 2/4, and 6/4. Soprano Saxophone 1 plays a melodic line with slurs and accents. Soprano Saxophone 2 has a rest in the second measure and a dynamic marking of *f* in the fourth. Soprano Saxophone 3 and 4 play similar melodic lines. Electric Instrument 1 has a dynamic marking of *p* and a diamond-shaped articulation mark. Electric Instruments 2-5 have rests in the first three measures and notes in the fourth. Electric Instruments 6 and 7 have a dynamic marking of *p* in the first measure and *mp* in the fourth. Electric Instrument 8 has a dynamic marking of *p* in the second measure and *p* in the fourth. A circled number '71' is placed above the first measure of the Soprano Saxophone 2 staff.

This musical score page, numbered 24, contains ten staves. The first four staves are for Soprano Saxophones (Sop. Sax. 1-4) and the remaining six are for Electric Instruments (Elect. 1-8). The score is written in 2/4 time and features a key signature change from 2/4 to 5/4 at the 30-measure mark. Sop. Sax. 1 and 2 play sustained notes with a *p* dynamic. Sop. Sax. 3 and 4 play melodic lines with a *f* dynamic, including a first ending bracketed as 71. Elect. 1 has a melodic line with a *mp* dynamic. Elect. 2-5 play sustained notes with a *p* dynamic. Elect. 6-8 play melodic lines with a *p* dynamic. The score includes various musical notations such as slurs, ties, and dynamic markings.

Sop. Sax. 1

33 *f* 3 3 *p* bisbi. 25

Sop. Sax. 2

33 *f* 3 3 *p* bisbi.

Sop. Sax. 3

33 *f* 3 3 *p* bisbi.

Sop. Sax. 4

33 *f* 3 3 *p* bisbi.

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8



B Electronics
Interlude I

Sop. Sax. 1

40 **C**

Sop. Sax. 1

Sop. Sax. 2 *f*

Sop. Sax. 3 *f (same as sax. 4)*

Sop. Sax. 4 *f (same as sax. 2)*

Elect. 1

Elect. 2

Elect. 3 (w/ reverb) (reverb: 8 seconds) *f*

Elect. 4 noise pulse *f (same as sax. 2)*

Elect. 5 noise pulse (w/ reverb) (reverb: 8 seconds) *f (same as sax. 2)*

Elect. 6 noise pulse *f (same as sax. 3)*

Elect. 7 noise pulse *f (same as sax. 3)*

Elect. 8

47

Sop. Sax. 1 *f* (same as sax. 3)

Sop. Sax. 2 *f*

Sop. Sax. 3

Sop. Sax. 4 *f* (same as sax. 1)

Elect. 1 noise pulse *f* (same as sax. 4) (w/ reverb)

Elect. 2

Elect. 3

Elect. 4

Elect. 5 (w/ reverb) (reverb: 8 seconds) *f*

Elect. 6

Elect. 7 (w/ reverb) (reverb: 8 seconds) *f*

Elect. 8 noise pulse *f* (same as sax. 4) (w/ reverb)

55

Sop. Sax. 1 *f*

Sop. Sax. 2

Sop. Sax. 3 *f*

Sop. Sax. 4

Elect. 1 *f* (reverb: 8 seconds)

Elect. 2 noise pulse *f* (same as sax. 1)

Elect. 3 noise pulse *f* (same as sax. 1)

Elect. 4

Elect. 5

Elect. 6 (w/ reverb) (reverb: 5 seconds) *f*

Elect. 7 (w/ reverb) (reverb: 5 seconds) *f*

Elect. 8 (reverb: 8 seconds) *f*

30

59

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

(reverb: 3 seconds)

noise pulse

f (same as sax. 4)

noise pulse

f (same as sax. 4)

noise pulse

f (same as sax. 3)

noise pulse

f (same as sax. 3)

(w/ reverb)

(reverb: 3 seconds)

f

D

63

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Musical staff for Sop. Sax. 1. It features a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. The staff contains a melodic line with a long slur over the first two measures, followed by a triplet of eighth notes in the third measure, and another slur over the final two measures.

Sop. Sax. 2

Musical staff for Sop. Sax. 2. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a melodic line with a long slur over the first two measures, followed by a series of eighth notes with accents, and a triplet of eighth notes at the end. A dynamic marking of *p* is present below the first measure.

Sop. Sax. 3

Musical staff for Sop. Sax. 3. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a melodic line with a long slur over the first two measures, followed by a series of eighth notes with accents, and a triplet of eighth notes at the end. A dynamic marking of *p* is present below the first measure.

Sop. Sax. 4

Musical staff for Sop. Sax. 4. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a melodic line with a long slur over the first two measures, followed by a triplet of eighth notes in the third measure, and another slur over the final two measures. A dynamic marking of *p* is present below the first measure.

Elect. 1

Musical staff for Elect. 1. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 2.

Musical staff for Elect. 2. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 3

Musical staff for Elect. 3. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 4

Musical staff for Elect. 4. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 5

Musical staff for Elect. 5. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 6

Musical staff for Elect. 6. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 7

Musical staff for Elect. 7. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a sustained chord with a slur over the first two measures.

Elect. 8

Musical staff for Elect. 8. It features a treble clef, a key signature of one flat, and a 4/4 time signature. The staff contains a melodic line with a slur over the first two measures, followed by a sustained chord with a slur over the final two measures.

68 33

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

poco

p

The musical score is arranged in a system of 12 staves. The first four staves are for Soprano Saxophones (Sop. Sax. 1-4) and the last eight are for Electric Instruments (Elect. 1-8). The key signature is one flat (Bb) and the time signature is 6/4, which changes to 3/4 at the end of the piece. The Soprano Saxophones play a melodic line with triplets and slurs. The Electric Instruments provide accompaniment with slurs and dynamics. A 'poco' marking is present in the first staff, and 'p' (piano) markings are in the second, third, sixth, and seventh staves. The page number 68 is at the top left and 33 is at the top right.

34

70

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score is for a section of a jazz ensemble, starting at measure 34 and ending at measure 70. It features four Soprano Saxophone parts and eight Electric Instrument parts. The key signature is one flat (B-flat major or D minor), and the time signature is 3/4. The score includes various musical notations such as triplets, slurs, and dynamic markings. The Soprano Saxophone parts (1-4) feature melodic lines with triplets and slurs, with dynamics ranging from *f* to *p*. The Electric Instrument parts (1-8) provide harmonic support, with parts 1, 2, 3, and 8 featuring melodic lines and dynamics like *p*, *f*, and *sub. p*, while parts 4, 5, 6, and 7 play sustained chords. A 5/4 time signature change occurs at measure 54.

74 35

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score is for a section of a piece, starting at measure 74 and ending at measure 35. It features four Soprano Saxophone parts (Sop. Sax. 1-4) and eight Electric Guitar parts (Elect. 1-8). The Soprano Saxophones play a melodic line with various articulations, including slurs, accents, and triplets. The Electric Guitars provide accompaniment with long, sustained notes and some rhythmic patterns. The score is written in 4/4 time and includes dynamic markings such as *p* (piano) and *f* (forte). The key signature is one flat (B-flat major or D minor). The Soprano Saxophone parts are in treble clef, and the Electric Guitar parts are in treble clef. The Soprano Saxophone parts have a 3/4 time signature at the end of the section, while the Electric Guitar parts have a 2/4 time signature at the end of the section.

36

77

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score is for a section of a piece, starting at measure 77. It features four Soprano Saxophone parts (Sop. Sax. 1-4) and eight Electric Instrument parts (Elect. 1-8). The Soprano Saxophone parts are more complex, featuring melodic lines with triplets and slurs. The Electric Instrument parts are simpler, consisting of sustained notes with slurs. The score is written in 3/4 time, with a key signature of one flat (B-flat). The first four measures (77-80) are in 3/4 time, and the last two measures (81-82) are in 6/4 time. The Soprano Saxophone parts have a dynamic marking of mf at the beginning. The Electric Instrument parts have a dynamic marking of mf at the beginning. The score is written in a standard musical notation style with a grand staff for each instrument.

81

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

86

Sop. Sax. 1

[Bells up] Turning Bell side to side (slowly, and not synchronizing with Saxophone 3)

stop moving the bell at default position

f 6 3 *p*

Sop. Sax. 2

[Bell up] Turning Bell side to side (slowly, and not synchronizing with Saxophone 4)

stop moving the bell at default position

f 3 *p*

Sop. Sax. 3

[Bells up] Turning Bell side to side (slowly, and not synchronizing with Saxophone 1)

stop moving the bell at default position

f 5 3 *p*

Sop. Sax. 4

[Bells up] Turning Bell side to side (slowly, and not synchronizing with Saxophone 2)

stop moving the bell at default position

f 3 *p*

Elect. 1

p *f*

Elect. 2

p *f*

Elect. 3

p *f*

Elect. 4

p *f*

Elect. 5

p *f*

Elect. 6

p *f*

Elect. 7

p *f*

Elect. 8

p *f*

40

89

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

The musical score is divided into two systems. The first system contains four Soprano Saxophone parts (Sop. Sax. 1-4) and eight Electric Instrument parts (Elect. 1-8). The second system contains only the eight Electric Instrument parts. The Soprano Saxophone parts feature complex rhythmic patterns with triplets, sextuplets, and quintuplets, and dynamic markings of *sub. f* and *p*. The Electric Instrument parts consist of sustained notes with a *p* dynamic marking. The score is written in 6/4 time, with a 2/4 time signature change occurring at measure 89.

91 41

Sop. Sax. 1 *sub. f* *p*

Sop. Sax. 2 *sub. f* 5 5 *p*

Sop. Sax. 3 *sub. f* 3 3 *p*

Sop. Sax. 4 *sub. f* 6 6 *p*

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Musical staff for Sop. Sax. 1. The staff contains a melodic line with dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Sop. Sax. 2

Musical staff for Sop. Sax. 2. Includes dynamic markings *f* and *p*. Annotations include "gliss.", "(embochure gliss.)", and "timbral/Tc (fast)".

Sop. Sax. 3

Musical staff for Sop. Sax. 3. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Sop. Sax. 4

Musical staff for Sop. Sax. 4. Includes dynamic markings *f* and *p*. Annotations include "gliss.", "(embochure gliss.)", and "timbral/Tc (fast)".

Elect. 1

Musical staff for Elect. 1. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 2

Musical staff for Elect. 2. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 3

Musical staff for Elect. 3. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 4

Musical staff for Elect. 4. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 5

Musical staff for Elect. 5. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 6

Musical staff for Elect. 6. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 7

Musical staff for Elect. 7. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

Elect. 8

Musical staff for Elect. 8. Includes dynamic markings *f* and *p*. It features a series of notes with slurs and a complex rhythmic pattern in the latter half of the staff.

98 43

Sop. Sax. 1
sub. *f*

Sop. Sax. 2
sub. *f* *f* (embochure gliss.)

Sop. Sax. 3
sub. *f* trill 2(fast) Tc trill (slow)

Sop. Sax. 4
sub. *f* (embochure gliss.)

Elect. 1
+ granulation over time *f* *p* *f*

Elect. 2
+ granulation over time *f* *p*

Elect. 3
+ granulation over time *f* *p*

Elect. 4
+ granulation over time *f* *p* *f*

Elect. 5
+ granulation over time *f* *p* *f*

Elect. 6
+ granulation over time *f* *p*

Elect. 7
+ granulation over time *f* *p*

Elect. 8
+ granulation over time *f* *p* *f*

F Electronics
Interlude II

44

104

01'15"

Sop. Sax. 1

Sop. Sax. 1

G

f *p*

Sop. Sax. 2

(embochure gliss.)

f *p*

Sop. Sax. 3

f *p*

Sop. Sax. 4

(embochure gliss.)

f *p*

Elect. 1

p

Elect. 2.

p

Elect. 3

p

Elect. 4

p

Elect. 5

p

Elect. 6

p

Elect. 7

p

Elect. 8

p

Sop. Sax. 1

109

6 6 6 6

6/4

Sop. Sax. 2

(sounds like a gliss to C quarter flat)
staccatissimo

6/4

Sop. Sax. 3

5 5 5 5

6/4

Sop. Sax. 4

6/4

Elect. 1

6/4

Elect. 2.

6/4

Elect. 3

6/4

Elect. 4

6/4

Elect. 5

6/4

Elect. 6

6/4

Elect. 7

6/4

Elect. 8

6/4

Ta trill (slow)

110

Sop. Sax. 1

Musical staff for Sop. Sax. 1 in 6/4 time. The staff contains a series of sixteenth-note runs, each marked with a '6' below it. The piece concludes with a trill marked 'Ta trill (slow)' and 'sub. p'.

Sop. Sax. 2

Musical staff for Sop. Sax. 2 in 6/4 time. The staff contains a series of sixteenth-note runs. The piece concludes with a 'bisbi.' trill, marked '(faster than saxophone 3)' and 'p'.

Sop. Sax. 3

Musical staff for Sop. Sax. 3 in 6/4 time. The staff begins with a 'bisbi.' trill, marked '(slower than saxophone 2)' and 'sub. p'. The rest of the staff is mostly empty with a long slur.

Sop. Sax. 4

Musical staff for Sop. Sax. 4 in 6/4 time. The staff contains a series of sixteenth-note runs. The piece concludes with a 'bisbi.' trill, marked '(faster than saxophone 3)' and 'p'.

Elect. 1

Musical staff for Elect. 1 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 2

Musical staff for Elect. 2 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 3

Musical staff for Elect. 3 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 4

Musical staff for Elect. 4 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 5

Musical staff for Elect. 5 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 6

Musical staff for Elect. 6 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 7

Musical staff for Elect. 7 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

Elect. 8

Musical staff for Elect. 8 in 6/4 time. The staff begins with a 'bisbi.' trill and contains a long, sustained note with a slur.

48

111

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

f 5 5 5 5

f

f

f 6

bisbi.

articulate Ta

This musical score page, numbered 48, contains staves for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The music is in 4/4 time and ends with a 3/4 time signature. The Soprano Saxophone parts feature complex rhythmic patterns, including sixteenth-note runs and slurs. Sop. Sax. 1 includes a trill (tr) and a 'bisbi.' marking. Sop. Sax. 2 has an 'articulate Ta' marking. The Electric Instrument parts consist of sustained notes with long slurs. Dynamics include fortissimo (f) and a sixteenth-note run in the fourth saxophone part.

114

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

(microtonal gliss.)

(embochure gliss.)

gliss.

5

6

p

sub. f

f

49

50 116

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score is for a section of a piece, starting at measure 116. It features eight staves: four for Soprano Saxophones (Sop. Sax. 1-4) and four for Electric Instruments (Elect. 1-8). The key signature has one flat (Bb) and the time signature is 4/4. The Soprano Saxophone parts are more melodic and active, with various articulations like slurs and accents. The Electric Instrument parts are more rhythmic and harmonic, often using sustained notes and triplets. The score includes dynamic markings such as *f* and *mf*, and various musical notations like slurs, accents, and articulation marks. The page number 50 is in the top left, and the measure number 116 is at the top of the first staff.

Sop. Sax. 1

Musical staff for Soprano Saxophone 1. The staff is in treble clef with a 2/4 time signature. It begins with a whole rest in the first measure, followed by a 4/4 time signature change. The melody consists of a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff, and a triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Sop. Sax. 2

Musical staff for Soprano Saxophone 2. The staff is in treble clef with a 2/4 time signature. It begins with a whole rest in the first measure, followed by a 4/4 time signature change. The melody consists of a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff.

Sop. Sax. 3

Musical staff for Soprano Saxophone 3. The staff is in treble clef with a 2/4 time signature. It begins with a triplet of eighth notes (G4, A4, B4) in the first measure, followed by a 4/4 time signature change. The melody consists of a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff.

Sop. Sax. 4

Musical staff for Soprano Saxophone 4. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 1

Musical staff for Electric Saxophone 1. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 2

Musical staff for Electric Saxophone 2. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 3

Musical staff for Electric Saxophone 3. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 4

Musical staff for Electric Saxophone 4. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 5

Musical staff for Electric Saxophone 5. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 6

Musical staff for Electric Saxophone 6. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 7

Musical staff for Electric Saxophone 7. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

Elect. 8

Musical staff for Electric Saxophone 8. The staff is in treble clef with a 2/4 time signature. It begins with a half note G4, a half note A4, and a half note B4, all tied across the bar line. A dynamic marking of *p* is present below the staff. A triplet of eighth notes (G4, A4, B4) is indicated in the second measure.

H

123

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

air

re-articulale

ff

p

white noise

sine tone

f

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

air

re-articulale

ff

Elect. 1

sine tone

f

Elect. 2

white noise

ff

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

white noise

ff

Elect. 8

sine tone

f

Sop. Sax. 1

Musical staff for Sop. Sax. 1, showing a whole rest in 4/4 time.

Sop. Sax. 2

Musical staff for Sop. Sax. 2, showing a whole rest in 4/4 time.

Sop. Sax. 3

Musical staff for Sop. Sax. 3, showing a whole rest in 4/4 time. Includes performance markings: *air* (with a dashed line), *re-articulale* (with a circled note), and *ff* (with a wedge).

Sop. Sax. 4

Musical staff for Sop. Sax. 4, showing a whole rest in 4/4 time.

Elect. 1

Musical staff for Elect. 1, showing a sine tone with a long slur and a dynamic marking of *f*.

Elect. 2

Musical staff for Elect. 2, showing a whole rest in 4/4 time. Includes performance markings: *white noise* (with a dashed line), *ff* (with a wedge), and a circled note.

Elect. 3

Musical staff for Elect. 3, showing a whole rest in 4/4 time. Includes performance markings: *white noise* (with a dashed line), *ff* (with a wedge), and a circled note.

Elect. 4

Musical staff for Elect. 4, showing a sine tone with a long slur and a dynamic marking of *f*.

Elect. 5

Musical staff for Elect. 5, showing a sine tone with a long slur and a dynamic marking of *f*.

Elect. 6

Musical staff for Elect. 6, showing a sine tone with a dynamic marking of *f*.

Elect. 7

Musical staff for Elect. 7, showing a sine tone with a dynamic marking of *f*.

Elect. 8

Musical staff for Elect. 8, showing a sine tone with a long slur.

Sop. Sax. 1

Musical staff for Sop. Sax. 1. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *ff*. A dashed line above the note is labeled "air". In the fifth measure, there is a quarter note with a dynamic marking of *ff* and a slur above it labeled "re-articulale".

Sop. Sax. 2

Musical staff for Sop. Sax. 2. The staff is in 4/4 time and contains rests for all four measures.

Sop. Sax. 3

Musical staff for Sop. Sax. 3. The staff is in 4/4 time and contains rests for all four measures.

Sop. Sax. 4

Musical staff for Sop. Sax. 4. The staff is in 4/4 time and contains rests for all four measures.

Elect. 1

Musical staff for Elect. 1. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *ff*. A dashed line above the note is labeled "white noise". In the fifth measure, there is a quarter note with a dynamic marking of *ff* and a slur above it.

Elect. 2.

Musical staff for Elect. 2. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *f*. A slur above the note is labeled "sine tone".

Elect. 3

Musical staff for Elect. 3. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *f*. A slur above the note is labeled "sine tone".

Elect. 4

Musical staff for Elect. 4. The staff is in 4/4 time and contains rests for all four measures.

Elect. 5

Musical staff for Elect. 5. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *ff*. A dashed line above the note is labeled "white noise". In the fifth measure, there is a quarter note with a dynamic marking of *ff* and a slur above it.

Elect. 6

Musical staff for Elect. 6. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *f*. A slur above the note is labeled "sine tone".

Elect. 7

Musical staff for Elect. 7. The staff is in 4/4 time and contains rests for the first three measures. In the fourth measure, there is a half note with a dynamic marking of *f*. A slur above the note is labeled "sine tone".

Elect. 8

Musical staff for Elect. 8. The staff is in 4/4 time and contains rests for all four measures.

Sop. Sax. 1 *p seco*

Sop. Sax. 2

Sop. Sax. 3 *p seco*

Sop. Sax. 4

Elect. 1 *white noise* *ff*

Elect. 2

Elect. 3

Elect. 4 *white noise* *pp*

Elect. 5 *white noise* *pp*

Elect. 6 *sine tone* *f*

Elect. 7 *sine tone* *f*

Elect. 8 *white noise* *ff*

I

78

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

150

mp

f

p

Elect. 1

White noise masking

f

Elect. 2

White noise masking

f

Elect. 3

White noise masking

f

Elect. 4

White noise masking

f

Elect. 5

f

Elect. 6

f

Elect. 7

f

Elect. 8

f

157

Sop. Sax. 1 *mp* *ff*

Sop. Sax. 2 *<ff>* *<p>* *<ff>* *<p>* *ff*

Sop. Sax. 3 *<ff>* *<p>* *<ff>* *<p>* *ff*

Sop. Sax. 4 *<ff>* *<p>* *<ff>* *<p>* *ff*

Elect. 1 *f* *f*

Elect. 2 a pulse *f* *p*

Elect. 3 a pulse *f* *p*

Elect. 4 a swell *f* *f*

Elect. 5 *f* *f*

Elect. 6 a pulse *f* *p*

Elect. 7 a pulse *f* *p*

Elect. 8 *f* *f*

164

Sop. Sax. 1 *p*

Sop. Sax. 2

Sop. Sax. 3 21 *mp*

Sop. Sax. 4

Elect. 1 *f*

Elect. 2 White noise masking *f*

Elect. 3 White noise masking *f*

Elect. 4 *f*

Elect. 5 *f*

Elect. 6 White noise masking *f*

Elect. 7 White noise masking *f*

Elect. 8 *p*

168

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Detailed description: This section contains four staves for Soprano Saxophones. Staves 1, 2, and 4 contain whole rests throughout. Staff 3 contains a melodic line starting in 4/4 time, moving to 2/4 time. It begins with a half note G4, followed by a half note A4, then a quarter note B4, and continues with a melodic phrase. Dynamics include *f* and *mp*.

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Detailed description: This section contains eight staves for electric guitars. Staves 1, 2, 3, 4, and 5 have similar parts with a melodic line in 4/4 time transitioning to 2/4 time, marked with *f* and the instruction "a pulse". Staves 6 and 7 have melodic lines in 2/4 time marked with *f* and "a swell". Staff 8 has a melodic line in 4/4 time transitioning to 2/4 time, marked with *f* and "a pulse".

173

Sop. Sax. 1
pp < *poco* > *ff*

Sop. Sax. 2
pp < *poco* > *ff*

Sop. Sax. 3
ff

Sop. Sax. 4
pp < *poco* > *ff*

Elect. 1
p

Elect. 2

Elect. 3
f

Elect. 4

Elect. 5
p

Elect. 6
f

Elect. 7
f

Elect. 8
p

177

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

White noise masking

Elect. 2

vc

Elect. 3

vc

Elect. 4

White noise masking

Elect. 5

White noise masking

Elect. 6

vc

Elect. 7

vc

Elect. 8

White noise masking

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

The musical score is arranged in a system of staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4), and the bottom four are for Electroacoustic instruments (Elect. 1-8). The time signature changes from 4/4 to 6/4, then back to 4/4, and finally to 3/4. The Soprano Saxophone 4 part features a melodic line starting at measure 81, marked *mp* and *f*. The Electroacoustic parts 2, 3, 5, and 7 have a *f* dynamic and include a 'pulse' marking at the end of their lines. The score includes various musical notations such as rests, notes, slurs, and dynamic markings.

185

Sop. Sax. 1 *p* < *poco* > < > < > < > *f*

Sop. Sax. 2 *p* < *poco* > < > < > < > *f*

Sop. Sax. 3 *p* < *poco* > < > < > < > *f*

Sop. Sax. 4 *mp* *ff*

Elect. 1 *f* a swell

Elect. 2 *p* *f*

Elect. 3 *p* *f*

Elect. 4 *f* a swell

Elect. 5 *p* *f*

Elect. 6 *f* a swell

Elect. 7 *p* *f*

Elect. 8 *f* a swell

191

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

White noise masking

Elect. 3

Elect. 4

White noise masking

Elect. 5

Elect. 6

White noise masking

Elect. 7

Elect. 8

White noise masking

195

This musical score is divided into two systems. The first system includes four Soprano Saxophone parts (Sop. Sax. 1-4) and one Electroacoustic (Elect.) part. The second system includes eight Electroacoustic parts (Elect. 1-8). The Soprano Saxophone parts are mostly silent, with Sop. Sax. 2 playing a melodic line starting at measure 195. The Electroacoustic parts feature a variety of textures, including sustained notes, pulses, and white noise masking.

System 1:

- Sop. Sax. 1:** Silent.
- Sop. Sax. 2:** Melodic line starting at measure 195. Dynamics: *f* (measures 195-196), *mp* (measures 197-198).
- Sop. Sax. 3:** Silent.
- Sop. Sax. 4:** Silent.
- Elect. 1:** Sustained notes, then a pulse (*f*) at measure 197, and a swell at measure 198.

System 2:

- Elect. 2:** White noise masking at measure 197, followed by a melodic line (*f*) at measure 198.
- Elect. 3:** Sustained notes, then a pulse (*f*) at measure 197, and a swell at measure 198.
- Elect. 4:** White noise masking at measure 197, followed by a melodic line (*f*) at measure 198.
- Elect. 5:** Sustained notes, then a pulse (*f*) at measure 197, and a swell at measure 198.
- Elect. 6:** White noise masking at measure 197, followed by a melodic line (*f*) at measure 198.
- Elect. 7:** Sustained notes, then a pulse (*f*) at measure 197, and a swell at measure 198.
- Elect. 8:** White noise masking at measure 197, followed by a melodic line (*f*) at measure 198.

199

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

ff p ff p f p

f p

ff p ff p f mf p

ff p ff p f mp pp

f

p

f

p

f

p

f

p

J serializing the key fingerings over C6
(never repeating the same key fingering
until reaching a slap tongue)

203

Sop. Sax. 1 *ppp* *sempre mf*

Sop. Sax. 2 *pp* *pppp* *sempre mf*

Sop. Sax. 3 *sempre mf*

Sop. Sax. 4 *sempre mf*

serializing the key fingerings over C6
(never repeating the same key fingering
until reaching a slap tongue)

Elect. 1 *f* *sf* *f*

Elect. 2 *sf* *f*

Elect. 3 *f* *sf* *f*

Elect. 4 *f* *sf*

Elect. 5 *f* *sf* *f*

Elect. 6 *sf* *f*

Elect. 7 *f* *sf* *f*

Elect. 8 *f* *sf*

a pulse

White noise swell

207

Sop. Sax. 1 *sempre sf*

Sop. Sax. 2 *sempre sf*

Sop. Sax. 3 *sempre sf*

Sop. Sax. 4 *sempre sf (mf)*

Elect. 1 *poco* *f* *poco* *sub. f*

Elect. 2 *poco* *f*

Elect. 3 *poco* *f* *poco* *sub. f*

Elect. 4 *f* *poco* *sub. f* *poco*

Elect. 5 *poco* *f* *poco* *sub. f*

Elect. 6 *poco*

Elect. 7 *poco* *f* *poco* *sub. f*

Elect. 8 *f* *poco* *f*

211

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

K

221

ord.

Sop. Sax. 1

Musical staff for Sop. Sax. 1 in 4/4 time. It begins with a series of quarter notes on a whole staff, marked *sempre mf*. At measure 223, there is a five-measure phrase of eighth notes marked *f*, followed by a half note marked *p*, and then a half note marked *f* with a fermata.

Sop. Sax. 2

Musical staff for Sop. Sax. 2 in 4/4 time. It begins with a series of quarter notes on a whole staff, marked *sempre mf*. At measure 223, there is a five-measure phrase of eighth notes marked *f*, followed by a half note marked *p*, and then a half note marked *f* with a fermata. The staff continues with quarter notes marked *sub. mf*.

Sop. Sax. 3

Musical staff for Sop. Sax. 3 in 4/4 time. It begins with a series of quarter notes on a whole staff, marked *f*. At measure 223, there is a five-measure phrase of eighth notes marked *p*, followed by a half note marked *sub.* with a fermata, and then a five-measure phrase of eighth notes marked *f* and *p*.

Sop. Sax. 4

Musical staff for Sop. Sax. 4 in 4/4 time. It begins with a series of quarter notes on a whole staff, marked *sempre mf*. At measure 223, there is a five-measure phrase of eighth notes marked *sub.* with a fermata, followed by a five-measure phrase of eighth notes marked *f* and *p*, and then a half note marked *sub. mf*.

Elect. 1

Musical staff for Elect. 1 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre*.

Elect. 2

Musical staff for Elect. 2 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre* and *f*.

Elect. 3

Musical staff for Elect. 3 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre*.

Elect. 4

Musical staff for Elect. 4 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre*.

Elect. 5

Musical staff for Elect. 5 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *f* and *mf sempre*.

Elect. 6

Musical staff for Elect. 6 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre*.

Elect. 7

Musical staff for Elect. 7 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre* and *f*.

Elect. 8

Musical staff for Elect. 8 in 4/4 time. It features a *noise pulse* at the start, followed by a half rest. At measure 223, there is a five-measure phrase of eighth notes marked *mf sempre* and *f*.

Sop. Sax. 1

sub. *mf* sub. *f* *p* *f* *p*

Sop. Sax. 2

f *p* *f* sub. *mf*

Sop. Sax. 3

sub. *mf* *f* *p*

Sop. Sax. 4

sub. *f* *p* sub. *mf* *f* *p*

Elect. 1

noise pulse *f*

Elect. 2

f *p*

Elect. 3

f

Elect. 4

noise pulse

Elect. 5

Elect. 6

Elect. 7

pp

Elect. 8

noise pulse

230

Sop. Sax. 1 *f* *p* *sub. mf* *p* *f*

Sop. Sax. 2 *p* *f* *p*

Sop. Sax. 3 *sub. mf* *f* *p* *p* *f*

Sop. Sax. 4 *p* *mf*

Elect. 1

Elect. 2 *f*

Elect. 3 *f*

Elect. 4 noise pulse *f*

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score is for a section of a larger work, starting at measure 230. It features four Soprano Saxophone parts and eight Electroacoustic (Elect.) parts. The key signature is one sharp (F#) and the time signature is 6/4. The Soprano Saxophone parts are highly melodic and dynamic, with various articulations and phrasing. The Electroacoustic parts are more rhythmic and textural, with some parts featuring specific effects like 'noise pulse'. The score is written in a standard musical notation style with treble clefs and dynamic markings.

Sop. Sax. 1 *f* 3 3 3 3 3 3 *p* *f* *p*

Sop. Sax. 2 (*mf*) *f* *p* *f* 3 3 3 3 3

Sop. Sax. 3 (*mf*)

Sop. Sax. 4 *p* *f* *p* (*mf*)

Elect. 1 noise pulse

Elect. 2 noise pulse

Elect. 3 noise pulse

Elect. 4 noise pulse

Elect. 5 noise pulse *f*

Elect. 6 noise pulse

Elect. 7 noise pulse

Elect. 8 noise pulse

236 77

Sop. Sax. 1 *f* 3 3 3 3 (*mf*)

Sop. Sax. 2 *>p* *f* 3 3 3

Sop. Sax. 3 *f* *p* *f* 3 3 3 3 *p*

Sop. Sax. 4 *f* *p* (*mf*)

Elect. 1

Elect. 2 noise pulse

Elect. 3 *f*

Elect. 4 noise pulse

Elect. 5 noise pulse

Elect. 6 noise pulse

Elect. 7 *f*

Elect. 8 noise pulse

239

Sop. Sax. 1 *(mf)*

Sop. Sax. 2 *(mf)*

Sop. Sax. 3 *f* *p*

Sop. Sax. 4 *f* *(sub. mf)*

Elect. 1 *f*

Elect. 2

Elect. 3 noise pulse

Elect. 4

Elect. 5

Elect. 6

Elect. 7 noise pulse

Elect. 8

242

Sop. Sax. 1 *f* *p*

Sop. Sax. 2 *f* *p* *sub. mf*

Sop. Sax. 3 *sub. mf*

Sop. Sax. 4 *f* *p* *sub. mf*

Elect. 1

Elect. 2 *f*

Elect. 3 noise pulse *f*

Elect. 4 *f*

Elect. 5 noise pulse

Elect. 6

Elect. 7

Elect. 8 noise pulse

245

Sop. Sax. 1 *sub. mf*

Sop. Sax. 2 *f* *p* *sub. mf*

Sop. Sax. 3 *f* *p* *sub. mf*

Sop. Sax. 4 *f* *p*

Elect. 1

Elect. 2 noise pulse

Elect. 3

Elect. 4

Elect. 5 noise pulse *f*

Elect. 6

Elect. 7 noise pulse *f*

Elect. 8 *f*

Sop. Sax. 1

248 *f* *p* *f* *p*

Sop. Sax. 2

p

Sop. Sax. 3

f *p* *sub. mf*

Sop. Sax. 4

sub. mf *f* *p*

Elect. 1

noise pulse

Elect. 2

noise pulse

Elect. 3

noise pulse

Elect. 4

noise pulse

Elect. 5

f

Elect. 6

f noise pulse

Elect. 7

noise pulse *f*

Elect. 8

noise pulse

251

Sop. Sax. 1 *sub. mf* *p* *f* 3 3 3 3 3 3

Sop. Sax. 2 *f* 5 *p* *sub. mf*

Sop. Sax. 3 *f* 5 *p* (*sub mf*)

Sop. Sax. 4 (*sub mf*) *p*

Elect. 1

Elect. 2 noise pulse

Elect. 3 noise pulse

Elect. 4 *f*

Elect. 5 noise pulse *f*

Elect. 6 noise pulse

Elect. 7 5

Elect. 8 noise pulse

254

Sop. Sax. 1 *p* *f* 3 3 3 3

Sop. Sax. 2 *f* *p* *sub. f* 3 3 3 3 3

Sop. Sax. 3 *f* *p* 5

Sop. Sax. 4 *f* 3 3 3 3 (*sub mf*)

Elect. 1 noise pulse

Elect. 2 5

Elect. 3 *f*

Elect. 4

Elect. 5 noise pulse

Elect. 6 noise pulse

Elect. 7 *f*

Elect. 8 5

257

Sop. Sax. 1
(sub. mf)

Sop. Sax. 2
p *f* 3 3 3 *p*

Sop. Sax. 3
sub. f 3 3 3 3

Sop. Sax. 4
f *p* (sub. mf)

Elect. 1
noise pulse

Elect. 2
noise pulse

Elect. 3
noise pulse

Elect. 4

Elect. 5
f

Elect. 6

Elect. 7

Elect. 8
noise pulse

Detailed description of the musical score: The score is for a section of a larger work, starting at measure 257. It features four Soprano Saxophone parts and eight Electro-percussion parts. The key signature has one sharp (F#) and the time signature is 3/4.
 - Sop. Sax. 1: Starts with a half note G4 (sub. mf), followed by a half note A4, then a half note B4. At measure 259, it plays a quarter note G4 with a fermata, followed by a quarter note A4 with a fermata.
 - Sop. Sax. 2: Starts with a half note G4 (p), followed by a half note A4, then a half note B4. At measure 259, it plays a quarter note G4 (f), followed by a quarter note A4 (f), then a quarter note B4 (f).
 - Sop. Sax. 3: Starts with a half note G4 (sub. f), followed by a half note A4, then a half note B4. At measure 259, it plays a quarter note G4 (sub. f), followed by a quarter note A4 (sub. f), then a quarter note B4 (sub. f).
 - Sop. Sax. 4: Starts with a half note G4 (f), followed by a half note A4, then a half note B4. At measure 259, it plays a quarter note G4 (p), followed by a quarter note A4 (p), then a quarter note B4 (p).
 - Electro-percussion 1-8: Each part has a specific rhythmic role. Elect. 1, 2, 3, and 8 play noise pulses. Elect. 4 plays a rhythmic pattern of eighth notes. Elect. 5 plays a sustained note with a fermata. Elect. 6 and 7 are silent.

259

Sop. Sax. 1 *(sub. mf)*

Sop. Sax. 2

Sop. Sax. 3 *p* *f*

Sop. Sax. 4 *f* *p*

Elect. 1

Elect. 2

Elect. 3

Elect. 4 noise pulse

Elect. 5 noise pulse

Elect. 6 noise pulse

Elect. 7 noise pulse

Elect. 8 noise pulse



L Electronics Interlude III

261

01'15"

Sop. Sax. 1

M

262

Sop. Sax. 1

Musical staff for Sop. Sax. 1. The staff is in treble clef with a 6/4 time signature. It contains a series of notes with a slur over them, starting in the 4/4 section and continuing through the 2/4 section. A dynamic marking *f* is present at the end of the staff.

Sop. Sax. 2

Musical staff for Sop. Sax. 2. The staff is in treble clef with a 6/4 time signature. It contains a series of rests throughout the piece.

Sop. Sax. 3

Musical staff for Sop. Sax. 3. The staff is in treble clef with a 6/4 time signature. It contains a series of rests throughout the piece.

Sop. Sax. 4

Musical staff for Sop. Sax. 4. The staff is in treble clef with a 6/4 time signature. It contains a series of notes with a slur over them, starting in the 4/4 section and continuing through the 2/4 section. A dynamic marking *f* is present at the end of the staff.

Elect. 1

Musical staff for Elect. 1. The staff is in treble clef with a 6/4 time signature. It begins with a "noise pulse" marked with a dynamic *f*, followed by a series of rests.

Elect. 2.

Musical staff for Elect. 2. The staff is in treble clef with a 6/4 time signature. It contains a "noise pulse" marked with a dynamic *f* in the 4/4 section, followed by rests.

Elect. 3

Musical staff for Elect. 3. The staff is in treble clef with a 6/4 time signature. It contains a "noise pulse" marked with a dynamic *f* in the 4/4 section, followed by rests.

Elect. 4

Musical staff for Elect. 4. The staff is in treble clef with a 6/4 time signature. It contains a series of notes with a slur over them, starting in the 4/4 section and continuing through the 2/4 section. A dynamic marking *f* is present at the end of the staff.

Elect. 5

Musical staff for Elect. 5. The staff is in treble clef with a 6/4 time signature. It contains a series of notes with a slur over them, starting in the 4/4 section and continuing through the 2/4 section. A dynamic marking *f* is present at the end of the staff.

Elect. 6

Musical staff for Elect. 6. The staff is in treble clef with a 6/4 time signature. It contains a series of rests throughout the piece.

Elect. 7

Musical staff for Elect. 7. The staff is in treble clef with a 6/4 time signature. It contains a series of rests throughout the piece.

Elect. 8

Musical staff for Elect. 8. The staff is in treble clef with a 6/4 time signature. It begins with a "noise pulse" marked with a dynamic *f*, followed by a series of rests.

266

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

change of sine tone nature

change of sine tone nature

noise pulse

noise pulse

275

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8



N Electronics
Interlude IV

277

01'15"

Sop. Sax. 1

90

278 **O**

Sop. Sax. 1

air sound re-articulate

ff *sempre f*

Sop. Sax. 2

air sound re-articulate

ff *sempre f*

Sop. Sax. 3

air sound re-articulate

ff *sempre f*

Sop. Sax. 4

air sound re-articulate

ff *sempre f*

Elect. 1

ff

Elect. 2

air *ff*

Elect. 3

air *ff*

Elect. 4

air *ff*

Elect. 5

air *ff*

Elect. 6

air *ff*

Elect. 7

air *ff*

Elect. 8

air *ff*

This musical score page, numbered 90, contains measures 278 through 281. It features four staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Trumpets (Elect. 1-8). The Soprano Saxophone parts begin with a dynamic marking of *ff* and include performance instructions for 'air sound' and 're-articulate'. The Electric Trumpet parts also start with *ff* and include an 'air' instruction. The score is written in 3/4 time, with a key signature of one flat (B-flat). A large letter 'O' is placed above measure 278. The music consists of sustained notes and rhythmic patterns, with some parts including slurs and accents.

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Musical staff for Soprano Saxophone 1. It features a treble clef and a key signature of one flat. The staff contains a whole rest at the beginning, followed by a whole note chord consisting of a quarter rest, a half note G4, and a quarter note G4. A dynamic marking of $\text{p} \cdot \text{V} \circ$ is placed above the staff.

Sop. Sax. 2

Musical staff for Soprano Saxophone 2. It features a treble clef and a key signature of one flat. The staff contains a whole rest at the beginning, followed by a whole note chord consisting of a quarter rest, a half note G4, and a quarter note G4. A dynamic marking of $\text{p} \cdot \text{V} \circ$ is placed above the staff.

Sop. Sax. 3

Musical staff for Soprano Saxophone 3. It features a treble clef and a key signature of one flat. The staff contains a whole rest at the beginning, followed by a whole note chord consisting of a quarter rest, a half note G4, and a quarter note G4. A dynamic marking of $\text{p} \cdot \text{V} \circ$ is placed above the staff.

Sop. Sax. 4

Musical staff for Soprano Saxophone 4. It features a treble clef and a key signature of one flat. The staff contains a whole rest at the beginning, followed by a whole note chord consisting of a quarter rest, a half note G4, and a quarter note G4. A dynamic marking of $\text{p} \cdot \text{V} \circ$ is placed above the staff.

Elect. 1

Musical staff for Electric Guitar 1. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 2

Musical staff for Electric Guitar 2. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 3

Musical staff for Electric Guitar 3. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 4

Musical staff for Electric Guitar 4. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 5

Musical staff for Electric Guitar 5. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 6

Musical staff for Electric Guitar 6. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 7

Musical staff for Electric Guitar 7. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Elect. 8

Musical staff for Electric Guitar 8. It features a treble clef and a key signature of one flat. The staff contains a series of eighth notes with stems pointing up, each accompanied by a dynamic marking of $\text{p} \cdot \text{V}$.

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

The musical score is written for four Soprano Saxophones and eight Electric Guitars. The time signature is 2/4. The Soprano Saxophone parts (Sop. Sax. 1-4) feature melodic lines with dynamics of forte (f) and piano (p). The Electric Guitar parts (Elect. 1-8) provide a rhythmic accompaniment with various effects and articulations. The score is divided into two systems, with the first system containing measures 1-93 and the second system containing measures 94-186.

Sop. Sax. 1

Musical staff for Sop. Sax. 1. It begins in 4/4 time with notes marked *p* and *f*. At measure 2, the time signature changes to 2/4, and the notes are marked *sub. f*. A triplet of notes is indicated at the end of the staff.

Sop. Sax. 2

Musical staff for Sop. Sax. 2. It begins in 4/4 time with notes marked *p* and *f*. At measure 2, the time signature changes to 2/4, and the notes are marked *f* and *p*. A triplet of notes is indicated at the end of the staff.

Sop. Sax. 3

Musical staff for Sop. Sax. 3. It begins in 4/4 time with notes marked *p* and *f*. At measure 2, the time signature changes to 2/4, and the notes are marked *sub. f*. A triplet of notes is indicated at the end of the staff.

Sop. Sax. 4

Musical staff for Sop. Sax. 4. It begins in 4/4 time with notes marked *sf*. At measure 2, the time signature changes to 2/4, and the notes are marked *p*. A triplet of notes is indicated at the end of the staff.

Elect. 1

Musical staff for Elect. 1. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. A triplet of notes is indicated at the end of the staff.

Elect. 2

Musical staff for Elect. 2. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. Two triplet markings are present over the notes.

Elect. 3

Musical staff for Elect. 3. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2.

Elect. 4

Musical staff for Elect. 4. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. A triplet marking is present over the notes.

Elect. 5

Musical staff for Elect. 5. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. A triplet marking is present over the notes.

Elect. 6

Musical staff for Elect. 6. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. Two triplet markings are present over the notes.

Elect. 7

Musical staff for Elect. 7. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. A triplet marking is present over the notes.

Elect. 8

Musical staff for Elect. 8. The text "dense ping pong delay in the electronics" is written above the staff. It begins in 4/4 time and changes to 2/4 at measure 2. A triplet marking is present over the notes.

Sop. Sax. 1 *f*

Sop. Sax. 2 *f f p*

Sop. Sax. 3 *f p f p*

Sop. Sax. 4 *sub. f f p*

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

98

293

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page features eight staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4) and the bottom four are for Electric Instruments (Elect. 1-8). The score is divided into two measures by a double bar line. The first measure is in 2/4 time, and the second measure is in 2/4 time. The Soprano Saxophone parts include various dynamics such as *p*, *f*, and *sf*, along with articulation marks like accents and breath marks. The Electric Instrument parts consist of rhythmic patterns of eighth and sixteenth notes, often with accents. A rehearsal mark '21' is present in the first measure of the Soprano Saxophone 1 part.

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

p *f* *p* *f* *f* *sf*

78

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

dense ping pong delay in the electronics

297

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8



P Electronics
Interlude V

Sop. Sax. 1

Sop. Sax. 1 *sempre f* 300

Sop. Sax. 2 *sempre f*

Sop. Sax. 3 *sempre f*

Sop. Sax. 4 *sempre f*

White noise signal
200Hz

White noise signal
10KHz

White noise signal
200Hz

White noise signal
10KHz

White noise signal
200Hz

White noise signal
10KHz

White noise signal
200Hz

White noise signal
10KHz

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

321

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

(f)

(f)

(f)

(f)

Elect. 1

White noise signal

(f) Saxophones MASKED

Elect. 2

White noise signal

(f) Saxophones MASKED

Elect. 3

White noise signal

(f) Saxophones MASKED

Elect. 4

White noise signal

(f) Saxophones MASKED

Elect. 5

White noise signal

(f) Saxophones MASKED

Elect. 6

White noise signal

(f) Saxophones MASKED

Elect. 7

White noise signal

(f) Saxophones MASKED

Elect. 8

White noise signal

(f) Saxophones MASKED

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

transition to sine tone

Sine Tone Signal (fine tuning over time)

pp

poco

This musical score page, numbered 106, contains eight staves for Saxophones (Sop. Sax. 1-4) and eight staves for Electric Instruments (Elect. 1-8). The Saxophone staves feature a melodic line starting at measure 338, marked with a forte (*f*) dynamic. The Electric Instrument staves are marked with a forte (*f*) dynamic and the instruction "Saxophones MASKED". A crescendo hairpin spans the final two measures of the saxophone part, leading to a piano (*pp*) dynamic. Four callout boxes, one for each saxophone staff, contain the instruction: "choose a fingering which is possible to bisbi. in the next bars." The score is written in 4/4 time and includes various musical notations such as slurs, ties, and dynamic markings.

choose a fingering which is possible to bisbi. in the next bars.

choose a fingering which is possible to bisbi. in the next bars.

choose a fingering which is possible to bisbi. in the next bars.

choose a fingering which is possible to bisbi. in the next bars.

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

Saxophones MASKED

pp

pp

pp

pp

pp

pp

pp

pp

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Saxophones MASKED

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

355

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

molto

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Saxophones MASKED

pp

Elect. 1

Elect. 8

transion to white noise

white noise

360

364

Electronics Interlude VI

01'15"

Sop. Sax. 1

T

365

Sop. Sax. 1

Musical staff for Sop. Sax. 1 in 6/4 time. It features a melodic line starting with a quarter rest, followed by a quarter note G4, a quarter note A4, and a half note B4. A dynamic marking of *f* is placed below the first measure.

Sop. Sax. 2

Musical staff for Sop. Sax. 2 in 6/4 time. It features a melodic line starting with a quarter rest, followed by a quarter note G4, a quarter note A4, and a half note B4. Dynamic markings of *f*, *p*, and *f* are placed below the first, second, and third measures respectively.

Sop. Sax. 3

Musical staff for Sop. Sax. 3 in 6/4 time. It features a melodic line starting with a quarter rest, followed by a quarter note G4, a quarter note A4, and a half note B4. Dynamic markings of *f*, *p*, and *f* are placed below the first, second, and third measures respectively.

Sop. Sax. 4

Musical staff for Sop. Sax. 4 in 6/4 time. It features a melodic line starting with a quarter rest, followed by a quarter note G4, a quarter note A4, and a half note B4. Dynamic markings of *f*, *p*, and *f* are placed below the first, second, and third measures respectively.

Elect. 1

Musical staff for Elect. 1 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 4 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 4 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 2

Musical staff for Elect. 2 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 2 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 2 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 3

Musical staff for Elect. 3 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 2 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 2 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 4

Musical staff for Elect. 4 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 2 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 2 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 5

Musical staff for Elect. 5 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 2 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 2 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 6

Musical staff for Elect. 6 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 3 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 3 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 7

Musical staff for Elect. 7 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 3 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 3 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

Elect. 8

Musical staff for Elect. 8 in 6/4 time. It contains two measures of noise, followed by a measure of a sine tone, and another measure of noise. Labels 'noise' and 'Saxophone 4 MASKED' are placed above the first two measures, and 'sine tone' and 'Saxophone 4 MASKED' are placed above the third measure. A dynamic marking of *f* is placed below the first measure.

370

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

f *p* *f*

p *f*

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

p *f*

f

sine tone

Saxophone 1 MASKED

sine tone

Saxophone 2 MASKED

sine tone

Saxophone 2 MASKED

Saxophone 3 MASKED

f

Saxophone 3 MASKED

f

sine tone

Saxophone 1 MASKED

f

sine tone

Saxophone 1 MASKED

f

sine tone

Saxophone 1 MASKED

f

390

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

grace notes are to be played with the timbral trill key

f

f

f

pp

p

f

ff

fff

+ of a rougher tone

+ of a rougher tone

396

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

grace notes are to be played with the timbral trill key

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

403

Sop. Sax. 1 *simile* *f* 3

Sop. Sax. 2 *f*

Sop. Sax. 3 *f*

Sop. Sax. 4 *f*

Elect. 1

Elect. 2

Elect. 3 *pp*

Elect. 4 *p* + of a rougher tone

Elect. 5 + of a rougher tone *mp*

Elect. 6

Elect. 7

Elect. 8

Detailed description: This page of a musical score, numbered 116, contains staves for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The score is in treble clef with a key signature of one flat. Sop. Sax. 1 begins at measure 403 with a triplet of eighth notes marked *f* and *simile*. Sop. Sax. 2, 3, and 4 play sustained notes with various dynamics including *f* and *pp*. The electric instrument parts include notes with dynamics like *p* and *mp*, and specific performance instructions such as '+ of a rougher tone' for Elect. 4 and Elect. 5. The page concludes with empty staves for Elect. 6, 7, and 8.

410

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

f

f

f

fff

fff

ff

+ of a rougher tone

+ of a rougher tone

413

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 119, contains measures 413 through 415. It features eight staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Instruments (Elect. 1-8). The key signature is one sharp (F#) and the time signature is 4/4. Sop. Sax. 1 plays a melodic line with a forte (*f*) dynamic. Sop. Sax. 2 has rests followed by a melodic phrase with a forte (*f*) dynamic. Sop. Sax. 3 and 4 play complex rhythmic patterns with dynamics *p* and *pp*, including triplets and sextuplets. The electric instrument staves (Elect. 1-8) are mostly silent, with some melodic fragments in Elect. 2, 3, and 4.

This musical score page contains ten staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4), and the bottom six are for Electric Instruments (Elect. 1-8). Sop. Sax. 1 and 4 have dynamic markings of *f*. Sop. Sax. 2 has a *f* marking at the end. Elect. 3 and 4 have *f* markings. Elect. 5 has a *mp* marking and a performance instruction: "+ of a rougher tone". The score includes various musical notations such as rests, notes, slurs, and dynamic hairpins.

419

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

5

3 5

6

f

+ of a rougher tone

mf

+ of a rougher tone

f

421

Sop. Sax. 1 *f*

Sop. Sax. 2 *f*

Sop. Sax. 3

Sop. Sax. 4

Elect. 1 *fff* + of a rougher tone

Elect. 2 *ffff* + of a rougher tone

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8 *ff* + of a rougher tone

424

Sop. Sax. 1 *f* *p* 6 6

Sop. Sax. 2 *f* *p* 5 5

Sop. Sax. 3 *f* *p*

Sop. Sax. 4 *f* *p* 3 3

Elect. 1 *f*

Elect. 2.

Elect. 3 *f*

Elect. 4 *f*

Elect. 5 *f*

Elect. 6 *f*

Elect. 7 *f*

Elect. 8 *f*

repetition of phrases are always to be accented on the first note

Sop. Sax. 1

425

f 3 3 *p* *simile sempre*

for now:
continue with this dynamic motion
for the rest of this section

Sop. Sax. 2

f 6 6 *p* *simile sempre* ³ ³

for now:
continue with this dynamic motion for the rest of this section

Sop. Sax. 3

f 5 5 *p* *simile sempre*

for now:
continue with this dynamic motion for the rest of this section

Sop. Sax. 4

f 3 3 *p* *simile sempre* ³ ³

for now:
continue with this dynamic motion for the rest of this section

Elect. 1

f *f*

Elect. 2

f *f*

Elect. 3

f *f*

Elect. 4

f *f*

Elect. 5

f *f*

Elect. 6

f *f*

Elect. 7

f *f*

Elect. 8

f *f*

427

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

429

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

431

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

433

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

435

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

5 5 3 3 3 3 5 5

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

f f f f f f f f

437

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

438

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

440

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

The score consists of four staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Guitars (Elect. 1-8). The saxophones play melodic lines with slurs and fingerings (6, 5). The electric guitars play rhythmic patterns with dynamic markings (f, p) and accents.

442

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

443

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

444

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

445

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

446

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

447

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

448

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

449

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

451

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

453

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

> p

f > p

f

f

f

f

f

f

f

455

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

457

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

459

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

460

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

462

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

464

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 151, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with slurs and fingerings (e.g., '5'). The Electric Instrument parts are characterized by dynamic markings such as *p*, *f*, and *>p*, and include breath marks (V.O.) above notes. The notation is presented in a standard staff format with treble clefs.

465

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 152, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with slurs and fingerings (5 and 6) indicated below the notes. The Electric Instrument parts are primarily accompaniment, with dynamic markings such as *p* (piano) and *f* (forte) and accents. Some parts include breath marks (circles with a vertical line) and slurs. The score is written in treble clef with a key signature of one flat (Bb).

466

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 153, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts (measures 466-470) feature melodic lines with slurs and fingerings (5 and 7). The Electric Instrument parts (measures 466-470) consist of rhythmic patterns with dynamic markings of *f* (forte) and *p* (piano), and include breath mark symbols (V with a circle) above certain notes.

467

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

5 5 5 5

5 5

5 5

5 5

p *f*

f

p *f*

f *p*

f *p*

p *f* *p*

f *p*

p *f* *p*

468

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

469

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 156, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts (measures 469-472) feature melodic lines with slurs and fingering numbers (5 and 7) written below the notes. The Electric Instrument parts (measures 469-472) are primarily sustained notes with dynamic markings of *p* (piano) and *f* (forte) and hairpins indicating crescendos and decrescendos. Some notes in the electric parts are marked with a circled 'v' and a checkmark, possibly indicating vibrato or breath marks. The score is written in treble clef with a key signature of one sharp (F#).

470

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

471

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Sop. Sax. 1 ⁴⁷²
6

Sop. Sax. 2

Sop. Sax. 3
5 5 5 5

Sop. Sax. 4
7 7

Elect. 1
p *f*

Elect. 2
p *f* *p*

Elect. 3
p *f*

Elect. 4
f *p*

Elect. 5
f *p*

Elect. 6
f *p* *f*

Elect. 7
f *p*

Elect. 8
f *p* *f*

473

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

7 7

5 5

5 5 5 5

p *f* *p*

f *p*

p *f* *p*

f *p*

f

p *f* *p*

f

p *f* *p*

474

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 161, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts (measures 474-475) feature melodic lines with slurs and fingerings (5 and 6). The Electric Instrument parts (measures 474-475) consist of sustained notes with dynamic markings of *f* (forte) and *p* (piano) and include breath mark symbols (V with a circle) above the notes.

475

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

7 7 6 5 5 5 5

p *f*

f

p *f*

f *p*

f *p*

p *f* *p*

f *p*

f *p*

p *f* *p*

p *f* *p*

Detailed description: This page of a musical score, numbered 162, contains staves for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with slurs and fingerings (7, 6, 5) indicated below the notes. The Electric Instrument parts consist of sustained notes with dynamic markings such as *p* (piano) and *f* (forte). A rehearsal mark '475' is placed at the beginning of the first staff.

This musical score page, numbered 163, features ten staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4), and the bottom six are for Electric Guitars (Elect. 1-8). The Soprano Saxophone parts consist of melodic lines with slurs and fingerings (5 and 6). The Electric Guitar parts are primarily accompaniment, featuring chords and single notes with dynamic markings of *p* (piano) and *f* (forte). The notation includes various articulations such as accents and breath marks.

Sop. Sax. 1
476
6

Sop. Sax. 2
5 5 5 5

Sop. Sax. 3

Sop. Sax. 4
5 5 5 5

Elect. 1
p *f*

Elect. 2
p *f* *p*

Elect. 3
p *f*

Elect. 4
f *p*

Elect. 5
f *p*

Elect. 6
f *p* *f*

Elect. 7
f *p*

Elect. 8
f *p* *f*

477

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

7 7

6

5 5

6

p *f* *p*

f *p*

p *f* *p*

f *p*

f

p *f*

f

p *f* *p*

Sop. Sax. 1
Sop. Sax. 2
Sop. Sax. 3
Sop. Sax. 4

478
6
5
5
5
7
7

Elect. 1
Elect. 2
Elect. 3
Elect. 4
Elect. 5
Elect. 6
Elect. 7
Elect. 8

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

479

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

7 7

6

5 5

p *f*

f

p *f*

f *p*

p *f* *p*

f *p*

p *f* *p*

f *p*

p *f* *p*

f *p*

480

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 167, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with slurs and fingerings (5 and 6) indicated below the notes. The Electric Instrument parts consist of rhythmic patterns with dynamic markings of *p* (piano) and *f* (forte) and include breath marks (V.O.) above the notes. The score is written in treble clef with a key signature of one sharp (F#).

This musical score page, numbered 168, features a system of ten staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4), and the bottom six are for Electric Instruments (Elect. 1-8). The Soprano Saxophone parts (measures 481-484) consist of melodic lines with slurs and fingerings (7, 6, 5) indicated below the notes. The Electric Instrument parts (measures 481-484) feature dynamic markings (*p*, *f*) and accents (*acc.*) on various notes, with some parts including slurs and ties. The notation is in treble clef with a key signature of one sharp (F#).

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

482

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

483

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

Detailed description of the musical score: The page contains eight staves. The top four staves are for Soprano Saxophones (Sop. Sax. 1-4). Sop. Sax. 1 and 2 play a melodic line with slurs and fingerings of 6. Sop. Sax. 3 and 4 play a similar melodic line with slurs and fingerings of 5. The bottom four staves are for Electric Basses (Elect. 1-8). Elect. 1, 2, 3, 4, 6, 7, and 8 play a rhythmic pattern with slurs and dynamics of p and f. Elect. 5 is mostly silent with an initial dynamic of >p. The score is in 4/4 time and features a variety of articulation and dynamic markings.

484

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

485

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

486

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

488

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 175, contains measures 488 through 491. It features four staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Instruments (Elect. 1-8). The Soprano Saxophones play a melodic line with a long slur across measures 488 and 490. Fingerings are indicated by numbers 5 and 6. The Electric Instruments provide accompaniment with various dynamics: *p* (piano) and *f* (forte). The score includes articulation marks such as accents and slurs, and dynamic markings like *p* and *f* are placed below the staves. The Soprano Sax. 4 part has fingerings of 5 and 6. The Electric Instrument parts have various articulation marks and dynamic markings.

489

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

5 5 5 5

6 5

8 6

6 6

p

p *f* *p*

p

f

p *f*

p *f*

p *f*

p

490

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 177, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with slurs and fingerings (5 and 6) indicated below the notes. The Electric Instrument parts are primarily sustained notes with dynamic markings of *f* (forte) and *p* (piano). The score is written in treble clef with a key signature of one sharp (F#).

491

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

5

6

5

6

5

6

5

6

5

p

f

p

f

>p

f

p

p

p

f

492

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

The image shows a page of a musical score for a jazz ensemble. It features four soprano saxophone parts (Sop. Sax. 1-4) and eight electric guitar parts (Elect. 1-8). The saxophones play melodic lines with fingerings 5 and 6. The electric guitars play accompaniment with dynamics p and f, and some have vibrato marks.

493

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 180, contains measures 493 through 500. It features four staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Instruments (Elect. 1-8). The Soprano Saxophones play melodic lines with various articulations and fingerings (5 and 6). The Electric Instruments provide accompaniment with dynamic markings of *f* (forte) and *p* (piano), and include breath marks (V) and accents (v). The score is written in treble clef with a key signature of one sharp (F#).

494

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 181, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with various articulations and fingerings (6 and 5) indicated below the notes. The Electric Instrument parts consist of sustained chords and melodic fragments, with dynamic markings of *f* (forte) and *p* (piano) used throughout. The score is written in treble clef with a key signature of one sharp (F#).

495

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2.

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 182, contains measures 495 through 500. It features four staves for Soprano Saxophones (Sop. Sax. 1-4) and eight staves for Electric Instruments (Elect. 1-8). The Soprano Saxophones play a melodic line with sixteenth-note patterns, marked with fingerings 6 and 5. The Electric Instruments provide accompaniment with various dynamics, including piano (*p*) and forte (*f*), and include articulation marks like accents and slurs. The notation is in treble clef with a key signature of one sharp (F#).

496

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 183, contains parts for four Soprano Saxophones (Sop. Sax. 1-4) and eight Electric Instruments (Elect. 1-8). The Soprano Saxophone parts feature melodic lines with various fingerings (5 and 6) and dynamic markings. The Electric Instrument parts consist of sustained notes with dynamic markings such as *p* (piano) and *f* (forte), and some include breath marks (V.O.). The score is written in treble clef with a key signature of one sharp (F#).

497

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

This musical score page, numbered 184, contains measures 497 through 500. It features four Soprano Saxophone parts (Sop. Sax. 1-4) and eight Electric Instrument parts (Elect. 1-8). The Soprano Saxophone parts are written in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. They feature melodic lines with slurs and fingerings (5 and 6) indicated below the notes. The dynamic marking *mf* is present. The Electric Instrument parts are also in treble clef with the same key signature and time signature. They consist of sustained notes with dynamic markings of *f* and *p*, and some parts include a *V.C.* (Vibrato) symbol above the notes. The score concludes with a double bar line and repeat dots at the end of each part.

499

Sop. Sax. 1

sub. f

Sop. Sax. 2

sub. f

Sop. Sax. 3

sub. f

Sop. Sax. 4

sub. f

Elect. 1

p f p f

Elect. 2

p f p

Elect. 3

p f p f

Elect. 4

f p f

Elect. 5

p f p f

Elect. 6

p f p f

Elect. 7

p f p f

Elect. 8

p f p f

500

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8

502

Sop. Sax. 1

Sop. Sax. 2

Sop. Sax. 3

Sop. Sax. 4

Elect. 1

Elect. 2

Elect. 3

Elect. 4

Elect. 5

Elect. 6

Elect. 7

Elect. 8



W Electronics
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fine

Sop. Sax. 1