

ELEATIC
CONCEPTIONS
OF
MUSICAL
EXPERIENCE

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ON THE SOURCES AND THEIR TRANSLATIONS

My primary source for Parmenides of Elea in quotation is from John Burnet's translation, strictly chosen as it is available in the public domain. His translation is remarkably clear, but it attempts to retain a poetic style, thus in certain sections there is a lack of clarity or a translation that I find inferior to modern translations; therefore, these are cross referenced with those of David Gallop and Richard McKirahan, from which I will supply comments on specific sections as to aid comprehension.

Concerning Zeno of Elea, from whom nothing that can be directly attributed remains, my primary source is H.D.P. Lee's work, which does a serviceable job at compiling the statements in Greek philosophy that reference his paradoxes.

For Melissus of Samos, whose language is less opaque than that of his teacher, I have only turned to Burnet, and I believe this translation is fitting enough to provide the necessary details.

My citations for Parmenides will refer to fragment and line numbers, e.g. (1.24-32)

My citations for Zeno will refer to both H.D.P. Lee's pagination and the manner of citing the sections he cites himself, e.g. Aristotle, *Phys.* Z 9. 239b 5

My citations for Melissus will refer to the fragment numbers only, e.g. (7)

AN INTRODUCTION TO THE WAY OF TRUTH AND THE WAY OF SEEMING

Welcome, O oneth, that comest to my abode on the car that bears thee tended by immortal charioteers! It is no ill chance, but right and justice that has sent thee forth to travel on this way. Far, indeed, does it lie from the beaten track of men! Meet it is that thou shouldst learn all things, as well the unshaken heart of well-rounded truth, as the opinions of mortals in which is no true belief at all¹. Yet none the less shalt thou learn these things also,—how passing right through all things one should judge the things that seem to be².

(1.24-32)

¹ Gallop: “in which there is no true trust”; McKirahan: “which comprise no genuine conviction”

² Gallop: “how the things which seem Had to have genuine existence, permeating all things completely.”; Mckirahan: “how it was necessary that the things that are believed to be should have their being in general acceptance, ranging through all things from end to end.”

At the heart of the argument lies a central tautology that consists of three points:

That it is and that it cannot not be (2.3)

That it is is found by moving away from what it is not and what is but must not be (2.5)

That it is is total and absolute, and any partial conception of what is is as wrong as complete falsehood, because if it is is not a complete expression of what is, then it is what is not (6.4-5) (8.11)

The consequence of this tautology is that a thing can only be itself in both *what it is* and how that is expressed. If at any point the expression of *what it is* is comprised in some manner, as to render the expression so that it is *what is not* or *what is but must not be*, then the expression is not true. Thus, in contrast to the tautology, the path to seeming is derived from the subjective opinions, ideas, and beliefs of humans, who either know *not what it is* or know *what it is* and twist it according to their wishes:

*the opinions of mortals,
giving ear to the deceptive ordering of my words.
Mortals have settled in their minds to speak of two forms, one of which
they should have left out, and that is where they go astray from the truth.* (8.51-54)

This is the primary logic that Parmenides employs, and which Zeno and Melissus defend, thus it must be expressed that the acceptance of any ideas that follow require an acceptance of this logic. If one cannot accept this, then one will find it difficult to accept any of the arguments that I will make.

My interpretation is strictly focused on the existence and non-existence of *what is* and *what is not*, respectively, which might be considered close to that of Bertrand Russell's work in negative existentials; however, I am interested in only two things: the consequences of Plato's Theory of Forms, and the influence that Parmenides' epistemology has upon that theory.

However, my stance will appear to be that of an unorthodox Eleatic, a term I wish to use to distance myself from the flaws inherent in Zeno and Melissus' own works, for my ideas presented in this work, while benefiting from theirs, are somewhat different from

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their own orthodoxy; furthermore, I am one who views Parmenides with thousands of years of distance, and much of my methodology is derived from Christian Neoplatonism, namely the tradition of Clement of Alexandria's apophatic theology; that is, a theological method that argues that one cannot begin to even have knowledge of God without having first banished all that is not God.

Therefore, whereas Parmenides conjures the goddess to build an argument against perception from the starting point of *what is*, my method is to engage with what we perceive—thanks to the developments that Harry Partch and James Tenney have made, and how those have altered my own experience of musical practice—and find *what is via negativa*, so that the result is a sort of reverse empiricism, as to build an argument against perception from the starting point of perception, knowing that the result will lead to *what is* by casting out the discrepancies between what is undeniably true in objective acoustic phenomena and what psychoacoustically created by our sense experience. Thus, the ultimate epistemology that I express is that our actual sense knowledge is of no value because *what is* is exterior in a manner that makes perceptual experiences of it untrustworthy, and those perceptions must be repudiated to seek knowledge, *for the thing expresses itself*, even if that knowledge that it itself express can never be known personally known. Just as in apophatic theology, in which one only knows of God through John 1:18 (*Deum nemo vidit unquam*), one must first begin with the postulate that one knows nothing of God, from which one can then remove the things that one thinks one knows of God until one finds the manner in which God expresses himself, which John expresses is through Christ as God (*unigenitus Filius, qui est in sinu Patris, ipse enarravit*), so that the Love of Christ reveals to us that God's essence is the pure embodiment of Love. This sort of pure knowledge is beyond our perception of it, and though it might be reasoned abstractly, it can never be known outside of a reductive form of reasoning that leads one to understand *the thing itself*, not one's *perception* of the thing.

Aesthetically, the Eleatic truth might appear to some as similar to high modernism in its espousal of supreme, unwavering truth, but it is important to express to any post-modernists, post-post-modernists, and neo-romantics that modernism, and any other aesthetic trends, are the result of human opinions, ideas, and beliefs. I would prefer nothing written here, nor anything defined according to its results, be labeled according to aesthetic perceptions of what they are, as the primary goal is to convey *what is* and nothing more, not even our views of or reactions to *what is*, because *what is* is a logical, not

aesthetic, constant.

These truths having been defined, what must be done next is to find the proper definition of “music,” which is generally derived from what one perceives as truth; for, in order for these arguments to hold any weight, we must first have a universally understood definition of what we are arguing about. The best manner in this case would be to start with a generally accepted definition and remove attributes that do not fit our approach to the subject. However, as opposed to “music,” which I believe is too general a term to have any actual meaning, I would like to discuss the topic as “musical experience,” which I would believe a common definition would be:

The result of ordering notes to create a beautiful sound or evoke an emotional response.

This first definition is incorrect for our purposes because it describes music in such a way that it is subject to aesthetics and taste. Such a definition is improper because the question of truth is not one concerning whether or not something is good or bad, for that would be placing value or judgment on the truth, which is strictly above value or judgment. Conversely, if one wishes to argue what is good vs bad, all one would need to do is express it in the same way Plato would, wherein truth is good and beautiful. This is so as ideas beyond perception that begin to place value on certain orderings of perceptive qualities are not real, for taste is a subjective view of what is true, ignoring what one finds distasteful, and is thus opposed to truth. Therefore, having removed this we have:

The result of the perception of sound.

Yet, this definition is still insufficient due to the idea of perception, which most would only apply to humans and what they can sense; thus, perception is of no use to us, for even if we do not perceive something does not mean that it is not being perceived by any other organism, which undoubtedly has a musical experience, even if it is just vibration, thus we cannot necessarily believe in what we hear as true experience if we do not hear everything possible that other organisms may experience. That a musical experience is only what we perceive is so limited in scope that I feel it is far too inaccurate of a definition to truly express the experience of sound. Therefore, our final definition must be as so:

The result of sound.

Beyond this, when we discuss sound we are defining it as a certain rate at which the waveform vibrates, not just as a harmonic or inharmonic frequency, because by doing so we can remove any questions of taste, sentiment, or perceptive qualities so that the final point is one that is, and cannot be misconstrued as anything other than *what is*.

It should be understood that the entire principle behind this definition is determined by our period in time, one that is after Cage's *aesthetic revolution* and Tenney's exploration of our perception of sound, and one in which there is no differentiation at an objective level as to what sound is musical; thus, if we are to frame their ideas into an Eleatic framework: the way of truth is that all sounds are musical, because all musical sounds are frequencies like any other sound, even those that seem unmusical. This then contrasts with the way of seeming, wherein all sounds have the potential to be musical if they are *perceived* musically, which relies on the unreliability and fickle nature of the human senses.

Additionally, according to the way of seeming, sound must have a quality that an individual or cultural group decides is musical, and the very fact that this varied so widely prior to the universal acceptance of western tonal structure, and still varies in parts of the world unchanged by tonality, means that all qualities attributed to sound are essentially subjective. This, as in any other case of falsehood, is the result of a human commandeering *what is* and framing it in such a manner that *what is but must not be* becomes *what is not*, so that what we choose to believe as musical experience *is not*, but an invalid deviation from *what is*.

Thus, I will attempt to argue that *what is*, pertaining to musical experience, is totally antithetical to our *conception* of musical experience, not only in the western tradition, but in the eastern as well, and my argument is as so: musical experience is ungenerated and indivisible; therefore, it must be without change, without motion, and without time. Following this series of arguments, I will explain my reservations with our tuning systems and their promulgation via modern notation, a perpetuation of *what is but must not be*. To conclude, I will question whether or not we can write music today in our modern musical society while still retaining some semblance of *what is*.

UNGENERATED

One path only is left for us to speak of, namely, that It is. In it are very many tokens that what is, is uncreated and indestructible, alone, complete, immovable and without end. Nor was it ever, nor will it be; for now it is, all at once, a continuous one. For what kind of origin for it. will you look for? In what way and from what source could it have drawn its increase? I shall not let thee say nor think that it came from what is not; for it can neither be thought nor uttered that what is not is. And, if it came from nothing, what need could have made it arise later rather than sooner? Therefore must it either be altogether or be not at all. Nor will the force of truth suffer aught to arise besides itself from that which in any way is. Wherefore, Justice does not loose her fetters and let anything come into being or pass away, but holds it fast.

"Is it or is it not? " Surely it is adjudged, as it needs must be, that we are to set aside the one way as unthinkable and nameless (for it is no true way), and that the other path is real and true. How, then, can what is be going to be in the future? Or how could it come into being? If it came into being, it is not; nor is it if it is going to be in the future. Thus is becoming extinguished and passing away not to be heard of.

(8.1-21)

The first primary obstacle, and one I wish will one day be thrown away as useless, is whether or not the ideas that have been expressed are definitely true; that is, if *what is*, or anything at all, is generated, for if it has been put into being by something, then it can very well pass into nonbeing, or *nothingness*. Furthermore, if it can be in this state of *nothingness*, it can be said to not exist, for *nothing is not*, and to speak of it would be impossible, as if can come into being or pass out of being, then at any point in time, it cannot be, and if it cannot be it is *not*, and one cannot speak of *not* as *what is*; essentially, *what is* can only exist, if it cannot exist, then it can never exist.

We can distill the only true obstacle to the validity of non-generation in terms of musical experience into the argument that sound only comes into being through a prime mover; essentially, that there must be an outside actor that forces the creation of the musical experience in question, such as allowing a string to vibrate. If this were not so, then there would otherwise be no sound, because a string cannot vibrate itself.

The outside actor argument appears infallible on a surface reading, for it seems that it is indeed true; after all, things cannot exist without being put into being. However, this relies on one of two possibilities: either *what is* does not exist until it does exist, or that *what is* exists as potentiality until it does truly exist.

Concerning the former, if it can be said that the frequency inherent within something even as insignificant as a stone does not exist when not sounding, it is to say that the frequency cannot exist at all, as when the time came to put it into being, there would be nothing to put into being, as *not is not what is*. If it is to stress that a thing cannot be until it has been put into being, it must exist before it can exist, but if it does not exist before it exists, as the argument stands, then it is unknown if it can exist, because at that point in time it does not exist, and if it cannot be proven to exist, how can we expect it to exist when acted upon? Furthermore, if it has existed, but then passes, and thus has come out of being, then it can no longer exist, and it will no longer exist, simply because it does not exist.

Beyond this paradox, if one places it in a musical context, this argument also relies on sound existing only through perception in two ways. First, that it requires an outside actor: one must be there to act on it, and thus one must be there to put it into being, for it cannot exist without the actor; second, that the frequency cannot exist prior to the hearing of it by the outside actor (the outside perceiver): one must be there to hear it, and if it cannot be heard, one cannot necessarily know that it exists. The argument requires both an actor and reactor, for the actor must put it into being, but the actor

must also be there to perceive it as being, otherwise he would not attempt to put it into being, for one could not say whether he would even try to put into being what he cannot, or does not, perceive.

This sort of Berkelian, *esse is percipi*, subjective idealistic metaphysics is a conundrum that Parmenides explicitly avoids by denying any perceptive qualities in truth (7.4-5), for when he removes the sensory agent there is no longer a point of contention over whether or not a sound is even able to be perceived, e.g. a dog whistle being blown without any dog being nearby, as well as questioning if an actor is necessary at all to create such a thing, for it should not need anything exterior to express *what it is*, as that is intrinsic to *what it is*. Even if the vibrating body of the stone is not acted upon or cannot be perceived, one cannot question that it cannot happen or cannot exist; the stone must vibrate, and the vibration must have a frequency.

Now that we have banished these useless solipsisms, if one assumes potentiality, one has to first assume the existence of the object which has potentiality. If an object's potentiality does not exist, then one's perception of it cannot exist; conversely, if one's perception of it does not exist, that does not preclude the existence of potentiality, for it could exist at any time, even if one cannot perceive it. Potentiality then does not act as an argument against sound existing, despite it initially being formulated to point out that the frequency is perceived to exist when the body vibrates, strictly because it must assume the same axiom that our argument does in the primary existence of the frequency *prior* to any sound being produced. A human exists, and thus he can be born, but it is not that he exists because he is born, for that would deny his existence upon death, which is untrue. It is so first, generally, because the death of a human cannot deny the existence of any other human, and second, concerning that specific human, because he can continue being known, thought of, and understood beyond his physicality.

Yet, this argument is quite questionable; after all, the one problem with Parmenides is that he does not discuss the dilemma of physical death. Indeed, Parmenides is perfect in his metaphysics, that *a human is* because *a human is*, but, just as Zeno is questioned by Diogenes the Cynic about movement by taking a step and claiming he has moved, one can question coming into being and passing out of being by uttering the word, *death*; for, one cannot understand and comprehend a dead human without having an experience of that dead human when they were alive to know their existence. To this one can defer to Bertrand Russell's own problem with the existence of past things:

I think, however, that, if Parmenides could return from the dead and read what I have been saying, he would regard it as very superficial. "How do you know," he would ask, "that your statements about George Washington refer to a past time? By your own account, the direct reference is to things now present; your recollections, for instance, happen now, not at the time that you think you recollect. If memory is to be accepted as a source of knowledge, the past must be before the mind now, and must therefore in some sense still exist.

(Russell 1945, 51)

That is, the question of a body implies that the creation, and physical existence, of a body must require first its own existence beyond physicality, as a strictly immaterial idea, to define it, so that what exists can exist without a physical body; consequently, even in death the thing that dies exists beyond physicality because the form of its existence, a body, can be thought of and understood as a real thing.

However, I am not truly convinced by Russell's positive example of George Washington, and his negative example of Hamlet is far superior: Hamlet, the prince, does not exist; Hamlet, the prince, as an object, does not express itself, thus it requires definition, through Shakespeare's defining him through his actions and words in the play, or through an actor's conjuring of him on stage. When you think of Hamlet, and you first think of Lawrence Olivier as Hamlet, you are thinking of the manner in which Lawrence Olivier interprets Shakespeare's words about Hamlet, the prince. Hamlet must be put into being to exist to us, and it is the job of an existing thing to define Hamlet so that he can appear to exist; yet, this means that he also passes out of being when Olivier walks off the stage, for Hamlet does not continue being defined by Olivier, and because Hamlet cannot define itself, it cannot continue to persist. It is the same in Olivier's Richard III: the existing Richard III, that being the one who is not in the politically determined histories or Shakespeare's alterations of him, exists, defines himself, and can be thought of and understood; in contrast, Olivier's Richard III does not exist because Olivier must define it prior to acting it, he must understand how Shakespeare's Richard III is defined, and perhaps he may do research into how Richard III expresses himself, but the result not one in the same as the Richard III that is. Furthermore, because Olivier's Richard III does not persist when he walks off stage, that when you see Olivier he expresses himself, not Olivier's Richard III, then it cannot exist as Richard III exists. One could question this and say that you can clearly think of Hamlet if you think of the performance, for that can be thought of and understood; yet, this is not necessarily so, for, when you think of Olivier in one of his roles, you think of Olivier; Olivier exists, his roles do not.

What I then mean to express, and this is indubitably important, is

that the immaterial expression of the thing, prior to its physicality, prior to its possibility to be personally known, is of greater value than a sort of material image that might represent it, a material image that can be personally known. An image, a physical expression of something that exists, must have something to reference, something to be an *image of*. There are essential elements to a thing that define what it is. It is not simply George Washington's actions, the history one knows of him, that define him, but his very being, the things that lead to his physicality, those genetic materials that exist and combine to reveal him. Those things that allow for his being to define itself as an object must be apparent. Richard III, too, possesses those existential things; yet, Hamlet does not, for, Hamlet, the prince, is a creation from Shakespeare's will, something that does not exist, and cannot exist. Even if I see Lawrence Olivier play Richard III, I know that it is not the real, existing, Richard III, but the Richard III that Olivier creates; yet, I cannot know the existing Hamlet beyond Olivier as Hamlet because there is no existing Hamlet to know.

In the terms of musical experience this question of existentials might be applied to the notion that, despite the existence of the frequency, what can be said of the notion of whether or not the creation of a vibrating body means that the frequency can not exist until there is a body to define it. Essentially, it would express that without a string being produced there can be no frequency and no sounding body, for the string defines $2/1$ and also vibrates at $2/1$, or that without a violin we could not have any sound, and we must build the violin to access the sound. This argument assumes that a frequency cannot exist because a body does not exist, but if the body does exist then the frequency does exist.

Existence here, as in the example of George Washington, is being defined as physicality, thus this argument expresses the belief that something cannot exist if it is immaterial, that a body is required at all times to host it. Taking this belief seriously, it assumes that frequencies are only a material phenomenon that explicitly requires physicality, not logical or mathematical phenomena that can still be true without any physical form. Consequently, without the instrument being built, the frequency, and thus sound, would not exist prior to creation, thus having to be generated; furthermore, that because the bodies can be built and destroyed, be born and die, the frequencies inherent to those bodies must come and go with the body.

To challenge this we would have to question the idea of empirical knowledge; that is, whether something can be proven to have physicality if it cannot be physically approached, for the result of not

denying this route immediately will allow one to further plunge down it, and, after removing all immaterial existence, they would eventually return to the Berkelian assumption that only that which is perceived can be understood as true, and if something can no longer be observed that it cannot be proven to have truly happened.

If existence is physicality, then indeed, things cannot be as they have been described, but if existence means that it is, that it can be spoken of and comprehended, as Parmenides' goddess conveys,

I shall not let thee say nor think that it came from what is not; for it can neither be thought nor uttered that what is not is.

(8.7-8)

Then we are to set aside the one way as unthinkable (8.17), and thus physicality is not a prime factor of existence, *what is*, but instead existence is a prime factor of physicality; for, even if a sounding body does not have a physical form, it does still exist, as the property of the sounding body can be expressed; furthermore, if the sounding body had yet to be built, it exists because its properties can be understood and one can indeed build it; even more so, if the sound body is destroyed it still exists, for the body, having been known to exist, can be spoken of as any other thing that does exist; thus, the existence of the frequency can be said to have always been true, even before the first sounding body was built, and will exist after the last sounding body is destroyed, for the very fact that a vibrating body can exist, means that the frequency can exist, and the existence of the frequency also means that a vibrating body can exist.

INDIVISIBLE

Nor is it divisible, since it is all alike, and there is no more of it in one place than in another, to hinder it from holding together, nor less of it, but everything is full of what is. Wherefore all holds together³; for what is; is in contact with what is⁴.

(8.22-25)

³ Gallop: "Therefore [it] is all continuous"; McKirahan: "Therefore it is all united"

⁴ McKirahan: "for Being draws near to Being."

The topic at hand can function in two manners: there is the contrast between indivisible vs divisible, in which the difference is whether or not the contents form a perfect whole that cannot be split or if it can become two exclusive entities that can exist independent of one another, and hierarchy and holarchy, in which the structure can either be considered a unit in which certain points are privileged over another or is a cohesive unit in which all points occupy an equal status.

Both of these can possess the same function in the argument, as an indivisible structure is essentially a holarchy, with their opposites likewise, but I would like to highlight the question of hierarchy as separate, because it best defines the division of the octave in tonality, whereas indivisibility defines the building of the octave through acoustic experience.

Indivisibility is derived from that concept of sound as a unified whole, that all frequencies are interconnected. It can be understood through the overtone and undertone series at C, as one can find G and F, among others, and these pitches inherent within C also possess their own overtones, and so on. Thus, within C is the entire soundworld: in C there is G, and within G there is D, and within D there is A, and so on (fig. 1).

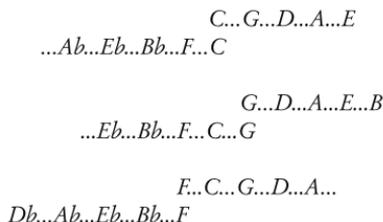


Fig. 1 Overtones and undertones

Eventually, we will reach a point in which the spiral of generated tones consists of every existing frequency, the partials, harmonic and inharmonic, and thus all possible points at which distinct sounds may occur.

Yet, it can also be understood in a much more intuitive manner with as little as a string, the very image of a waveform, which can be stopped at any point and create every possible frequency within the spectrum, audible or otherwise. In this manner the spectrum is complete and united, as we only need a single string to find everything, and nothing exterior to it is required, as if some pitches were outside the structure or hidden away, for it can be said that with the longest possible string, if one could physically tune it to 1Hz,

would reveal, upon each point, each possible hertz deviation, with the cycles per second increasing the further down the string one moves until the points become so infinitesimal that even the tip of a needle could not define them; therefore, the string can be understood as indivisible in a way no different than how Harry Partch would define our musical practice of the keyboard, in which things appear to be separate, and sound separate, because the intrinsic connection of pitches to one another within a spectrum is hidden by the visual experience of a key, which means one thing, a string struck at one point, allowing for a false division of a string into representing a specific pitch, as opposed to a string that contains everything. Thus, the singularity of the spectrum cannot be found in the keyboard, or in any instrument that emulates it, as seen in the manner in which we play stringed instruments, but can be found in Harry Partch's *one-finger technique*, in which the movement between two pitches does not deny the existence of those between the two, as in a keyboard, but it highlights the fine gradations inherent within the string that allow it to approach the beautiful qualities of the human voice.

The singularity of the spectrum also means that the different starting points one can choose within the spectrum—the overtone series at C vs G or the differences in tuning two strings as G vs D—are not mutually exclusive, but points within the single spectrum that interlock; for, even in the case of polyphony, multiple frequencies occurring at once from two different sources are not two spectrums combined into one, but the sum of the two points of a single spectrum as a single vibration, e.g. the equal tempered F# and A sounding at two different spaces being two expressions of the same spectrum, and the combined tone is the result of the two points in the spectrum occurring at the same time, for the waveform grows more complicated as the different points in the spectrum sound together; in contrast, the equal tempered C and equal tempered C sounding at two different spaces do not create a sum or difference tone, as they vibrate at the same point in the spectrum and produce the same exact frequency so that the waveform remains stable.

What I mean to say in all this is that sound, and musical experience, is one thing, undivided, and that it cannot be a plurality, one of many. When I discuss this idea of two sources providing the same thing, I recognize the *identity* of that thing in both situations, and though I perceive them to be two, they are one.

The opposing opinion, and one which I must repudiate, is that this single identity can be divided or be understood as distinct units, not a single thing; for, there can never be this opposite example of two frequencies from different sources existing within their own,

separate spectrums, and the resulting sum being that of two different sounds combined into a third so that there are three existing sounds: the first, the second, and the third. This is so as that implies first that the two frequencies and their sum tone are not of the same origin, that the F# is not the F# that appears in the overtones of A and that the A is not the A that appears in the overtones of F#, and the resultant F#-A sum tone does not exist within either spectrum, but within its own; for, what it conveys is that these frequencies are not unified, that two equal tempered F# frequencies and two equal tempered A frequencies exist mutually exclusive from one another, and that the two waves never actually make contact with one another, which would require the ear to combine the two into a third wave.

It might be better described in this manner: if one builds two squares at different points, with exactly the same qualities, are they the same square or are they different? Can two squares exactly the same in every way be mutually exclusive, or are they rather two of the same thing in different spots? It is completely true that one can make many squares, and one can create as many as one wishes, but these all derive from the fact that a single square exists for one to build. There simply cannot exist two squares exactly the same that are mutually exclusive, as only one square can exist: the square *that is*. The second square that exists *is that which is* the first square, for it is expressed in exactly the same manner as the square that exists and all other squares, which are an expression of the square that exists, as one cannot build a square without the existence of the square. It must be so that whatever square was built first does not matter, because they all require the existence of the square itself to be spoken of and understood.

If one imagines a synthesizer with two oscillators, creating two identical waves that can be panned to left and right stereo channels, their physical separation does not split them into two separate, existing waves, just as when they are both panned center they are not two different waves that just happen to inhabit the same location. Indeed there are two oscillators, but both create the same thing; it is rightfully so that one perceives two instances of the same wave, but the wave must be an existent thing to allow for those waves to appear. This is where I find the notion of binaural audio unbelievable, because it assumes a physical distance, the right and left headphones, to be physically unrelated and only cross through the perceptive faculties of the listener, who experiences a combination of the two that would otherwise not exist, as they assume the two will never meet.

It is so that our perceptive qualities create the illusion of

difference through distance; that is, we can believe something is different because, if it were truly one then to us it could only be in one spot, not two; therefore, we do not see the two squares as the same, for they are different in space. Yet, the square itself cannot move, because something that exists is essentially everywhere at once, as if it could not be then how would we be able to manifest it in another place? Thus, it can occur at any point in time, simply because it exists, for it can be thought of or expressed. The physicality of the distance is negligible, because, again, *physicality presumes existence*: in order for it to appear anywhere, *it must exist*. It might appear far too metaphysical, and thus unable to be argued empirically, but things that exist are consistent enough that there must be a universal, one that, outside of their physical occurrence, one can understand and express. This is where one might find Parmenides influence on Plato's Theory of Forms, and this view of a thing being the same in *identity*, *essence*, or *substance* in every manner it is perceived by the senses is intrinsic. One assumes in the distance of binaural audio that the two are separate because they mistake the quality of the frequency, the cycles per second of the waveform, for the identity of the waveform. If 441Hz and 445Hz are forcefully separated, it would not deny that both are waves possess the possibility of vibrating at the speed of the other, as both are rates of vibration of a waveform, and it is the identity of the waveform that is of importance in expressing itself, not the rate at which it vibrates.

Sound is indivisible in its primary existence because its existence contains all possibilities through the manifestation of harmonic and inharmonic phenomena; therefore, it cannot truthfully be put into another form separate from *it itself*, and there cannot be two equal tempered F# that are mutually exclusive simply because the locations are different or the timing places one before the other, for they are all expressions of the same equal tempered F# *that is*. If two pianos, perfectly in tune with one another, both played that equal tempered F#, would the listener perceive two sounds, or one? If one F# were tuned about ten cents away from the other, would the two F# notes still sound as one, or become two? If they exceed critical bandwidth and beating occurs, are these two tones we perceive to beat because our senses take the two instances and combine them, or is the beating the result of one complex combination tone prior to hearing? Moreover, if one takes off the headphones and places them on the table before them, would they then, no longer separated be one, and if so, how would they not have been one before that?

If on a viola one played an open string and a stopped string so they both represent the same frequency, even though there are two

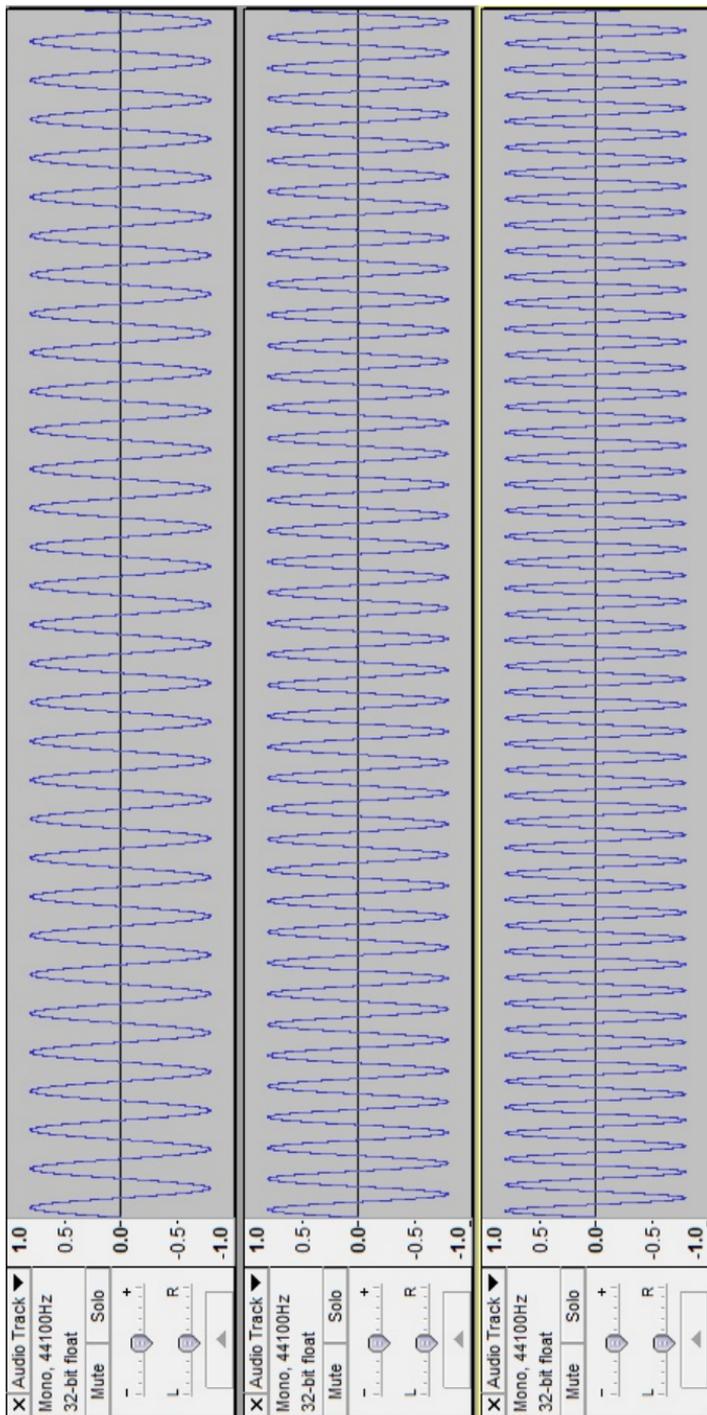
strings, there is one frequency, or, rather, waveform, yes? If on that stopped string one shifted their finger slightly, a few cents or so, as to create audible beating, is the result then two frequencies or only one in combination? One can reason that there are two frequencies, but to create the beating requires them to combine to create a sum tone in their head, through their perception. The two frequencies, like those of timbre in FM modulation, are combined to create the sum tone, yet, there is only one waveform in each situation that expresses the frequency, for the *identity* of the waveform cannot be a plurality, that there are many and not one.

And, while Zeno's paradoxes of plurality are disputable in their effectiveness, concerning the appearance of two strings as separate things that are independent of one another, Parmenides only argues from a conceptual standpoint; that is, because he denies *esse is percepti*, he denies the experience of seeing two individual strings and the experience of hearing two physically separated frequencies, and attempts to confirm the *existence of the waveform*, which the two strings represent in physicality. It must be clear that two locations produce the same result: the waveform *that is*; therefore, why would it be that if those same two pianos, the first playing an equal tempered A, the second an equal tempered F#, would produce two separate waveforms as opposed to one? If one F# from two spots is *one*, what is the reason to deny that A and F# from two spots are *not one*?

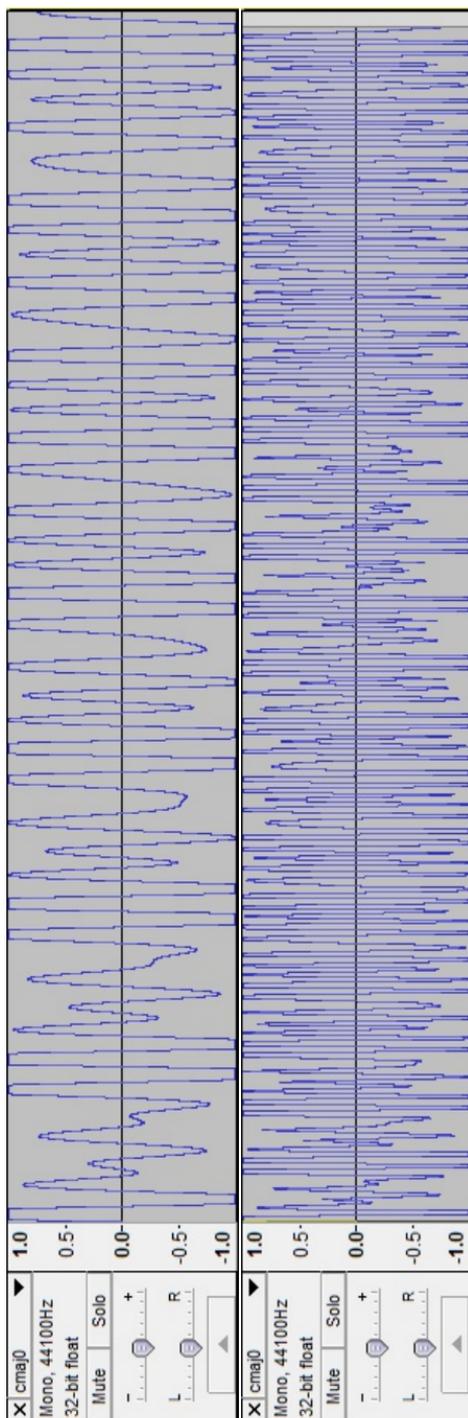
If it is merely so that each pitch is a frequency expressed by the speed at which the waveform vibrates, then it must be so that the final form of the waveform is the sum tone: one frequency is the waveform, two frequencies combined is the waveform, three frequencies combined is the waveform, and so on. So, if one takes three frequencies of an equal tempered C major chord: C0, 16.3515Hz; E0, 20.6016Hz; and, G0, 24.4996Hz⁵; then one will find that each frequency combines in such a way that their characteristic cycles per second merge into a single, complex frequency. One can visualize these frequencies (ex. 1) and note that the rate at which they vibrate leads to three distinct sounds when they appear separately, but when they appear simultaneously, the waveform expresses a complex combination of those individual frequencies (ex. 2). This singular expression of the waveform, one that in conception is *one thing*, provides a physical example of a waveform as *one thing*.

Yet, one might question this physical expression of the waveform as a sum frequency of the qualities of vibration being expressed, as

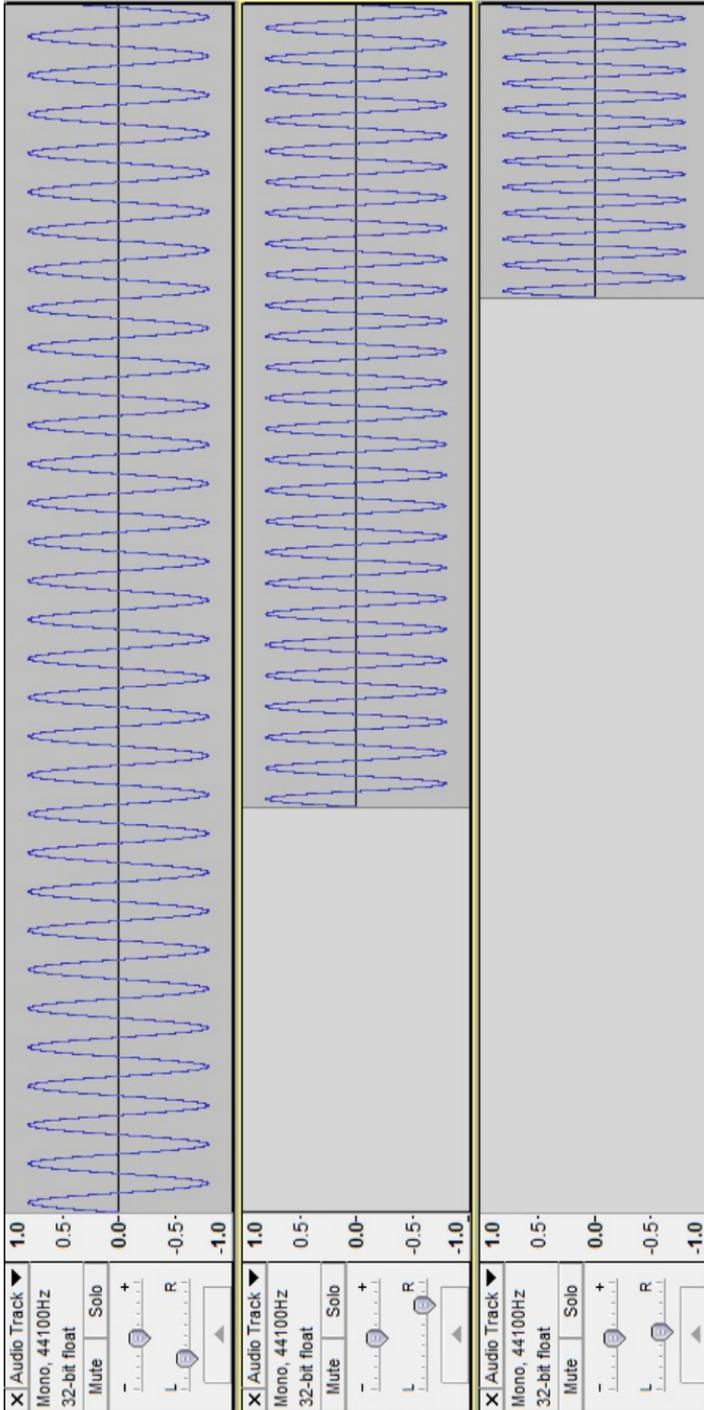
⁵ Of note, I have chosen these three low frequencies as it is easier to see the contour of their waves than those of a faster rate of vibration.



Ex. 1 Visual representation of the three frequencies separately



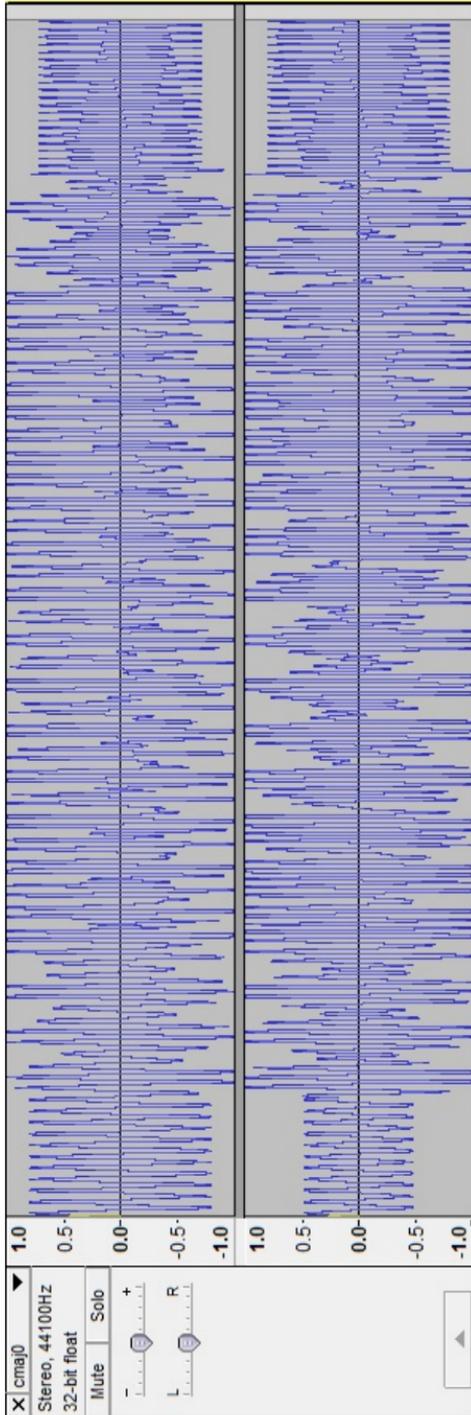
Ex. 2 From left to right, the visual representation of the combination tones at the same size as ex. 1, and the total 5 second duration



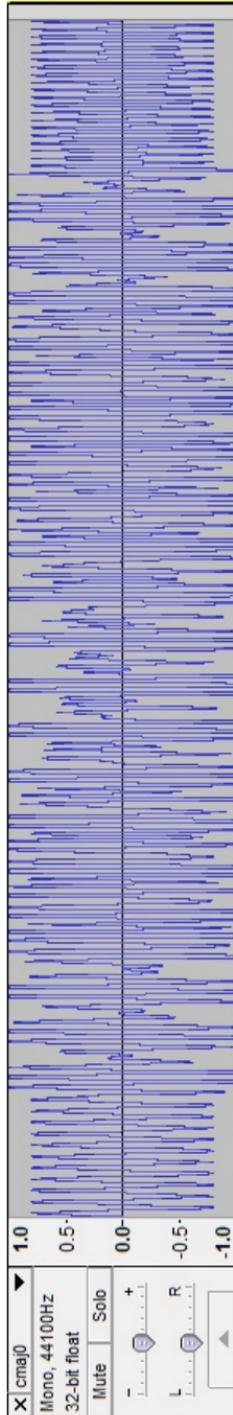
Ex. 3 The three frequencies staggered and stereo panned to create difference through distance

these examples express the waveform's unity, one without the physicality of distance that I have earlier denied as a perceptual illusion that refutes the unity of the waveform; after all, if one forces the examples to one position, one is not allowing for it is express *it itself*, but is forcing one's belief of *what is (what is not)* as to prove a point, then one is committing an act of sophistry. To deal with this problem of difference through distance, one can turn to example 3, in which the three frequencies are not only staggered to show distinct combinational results, but also stereo panned in an attempt to replicate the argument of difference through distance.

When these frequencies are combined in stereo (ex. 4), one can see that, though we try to create separate, physical waveforms through difference through distance, when one compares this to a compound mono waveform of it (ex. 5), one notices that, though there is an attempt to differentiate the waveforms as to express they are different from one another, the total contour of the wave in the mono mix is remarkably equivalent to each channel in the stereo, and, if one examines the waves in all three tracks closely, the paths of the waves are at the same rate, covering the same distance. In some sense, the only aspect that a stereo pan alters from the wave is the quality of its amplitude, the volume of the aspects of the sum. Outside of a total shift to left or right, which is completely impossible in three dimensional space, as the manner in which the vibration of the waveform affects the air does not affect the air on a two dimensional axis, the only effect the distance has on the physical wave is how one *perceives* it. Environmental perception exists on a three dimensional axis, one in which one's relationship to a source alters one's perception, and thus experience, of the combination of rates of vibration, but if the rate at which the total waveform vibrates does not physically change based upon distance, as the contour of the complex wave remains equivalent in the stereo and mono mixes, then one cannot argue that the three sources of sound are three, individual waveforms, but one complex waveform. A problem with recorded sound and electronic music, and part of the reason why Celibidache was against recordings of his performances, is that the means of reproducing the sounds, unless one possesses a massive sphere of speakers like the West German Pavilion at Expo '70, as a linear form of stereoscopic sound, it is not just that one cannot hear overtones or harmonics that the speakers cannot produce, but also the experience of sound as being above or below the perceiver, as one experiences in a live experience of music. Thus, in a three dimensional space, there are many possible, complicated, results of the complex waveform, and these cannot be found in a sort of forced method of separation, and



Ex. 4 Visual representation of the combination tones according to the perceived idea of difference through distance



Ex. 5 Visual representation of the combination tones against the perceived idea of difference through distance

the means of reproduction, even if the recording were recorded with omnidirectional microphones, cannot express the same thing that a perceiver would experience in that three dimensional space.

Even beyond the concept of the perceiver being in the three dimensional space, in some sense, the argument for individual waveforms cannot even be posed at all, because the answer requires an completely exterior, objective knowledge, one that we cannot necessarily know at all, for it to not simply be a subjective folly. This, of course, is not a defense of forced compartmentalization of music into a synthetic, two dimensional, stereoscopic plane, as that would assume that that which happens outside of the perceiver in three dimensional space does not exist, or is unimportant. The necessity of the argument against a forced compartmentalization of music, as in binaural audio, is that a true musical experience, say a harp in a forest, has so many unknowable consequences that it is unrealistic to accept that one's own individual experience is the only true experience of value. The result is not what we understand, but the sum total of all things in one space, and the result of this is that we experience C major, a summation of what seems to be three separate things, as one, quite complicated waveform built of three frequencies occurring simultaneously to create a combination tone, despite audibility or distance.

The indivisibility of the waveform being expressed, this is where one then finds the distinction of holarchy versus hierarchy. The indivisible frequency spectrum is the holarchy, within it exists all things, and all things are essentially equal because, harmonic or otherwise, they derive from the same unbroken structure. If one believed that the harmonic series were naturally created by a process that privileged them over others, then the indivisible spectrum would be a natural hierarchy, but because the example of the string points to the fact that all points on it have different frequencies, then we can say that, despite the rich qualities of the overtone series (though these being of greater interest than inharmonic tones is a value that is perceptual, not necessarily natural), each pitch is equal because the string does not place one over the other in terms of sound. Harmonics can be sounded on a string, but the string does not make the harmonics the primary method of sounding; that is, a harmonic is possible, but one must choose that spot among hundreds of others, so much so that they are a choice among choices, and they are ultimately choices we, not the natural world, make. Thus, we could make a choice to ignore a natural harmonic and stop any point on the string for an artificial harmonic, but that does not make that harmonic tone or the artificial harmonic tone superior to any other

point, it simply means that we have delineated that point as the one of value to us at that moment, and we create a hierarchy from our will alone in our defining of certain points over any others. The difference in the existence of stronger harmonic tones and weaker inharmonic tones does not lead to a natural hierarchy. One chooses the harmonic tone not because it is a naturally superior wavelength, but because they personally prefer that tone over others; that is, one must *first listen* to choose the harmonic tone; consequently, the choice of a harmonic tone over an inharmonic is hierarchical, for, if one chose to focus on inharmonic tones as the basis for one's musical structure, then one would then be placing one type of tone as superior and set it apart from the others based upon the value they place upon their experience of that tone.

Consequently, if a hierarchy is not a naturally occurring system, then it is difficult to argue for the division of the octave, which creates an artificial hierarchy, as one decides to divide into whatever manner they wish to give prominence to specific frequencies over others, because that would imply that these things that were generated by the overtones and undertones were put into place by he who divided the octave.

Yet, that argument is not sufficient enough, and the negative values of hierarchies and divisions are better pointed out in two problems that break with the constants already understood about existence and mutual exclusivity of multiple existing forms.

The first problem of division is that one is creating something that *does not exist*. For example, the twelve tone octave never existed in its specific form prior to its invention; rather, these twelve tones were always part of a single indivisible spectrum of thousands of tones within an octave, so it is true that this set of twelve do exist, but they do not exist in such a way that any other pitch would be conceived as foreign. This is so because if one abstracts a subset from a body, that thing is not a real thing, but a part of the real thing, and is intrinsically connected to the body of that real thing, the independence of its form willed into being by a human mind that convinces itself that it is real when it cannot be real if separated from its whole form. What I mean to say is that if one cut a square in half and calls it their own square, one cannot still truthfully call it a square. What one has done is create something that can not be—a rectangular square—something that is impossible to explain or think of without justification outside of itself.

One can question this logic by providing the example of a human body, in which the act of removing the hand and abstracting it as a subset of the body, that it is still a real thing, despite being separated

from the body, and its form has not been willed into being in the mind of the one that forced it into that position; yet, this point concerning the division of a body is not like Aristotle's in *On Generation and Corruption* (316a19), but concerns how one conceives of the division as a forcing of *what is* into *what is but is not*. What I mean to say is that if one divides the hand from the body, one cannot then call that the body; indeed, the hand is part of the body, but the hand itself is not the body; for, if it were divided, then one would not view it and assume that it is the body, not the hand, and then when one encounters the whole body, with the hand, it cannot be deemed the body, even if it is, because one has already made the point that the hand is the body, so that body must be something else.

It is true that one can *forcefully* divide the octave, but one cannot truthfully say that *it is*, because it, like the half square, is not in the form that *it is*. It appears to be true, and it clearly exists because it can be spoken of, but this is because the contents of this form exist in their true nature and have been commandeered for a new, artificial purpose, *it is but must not be*. You can speak of something that you create from nothing, but it is because you use knowledge of *what is* to create something *what is but must not be*: a chimera, a thing that does not exist, and only exists if it is defined in a way to shift what does not exist into the realm of possibility through redefinition, still cannot exist; rather, it exists because it is the thing that it is, not what we say it is: what is but must not be. Therefore, if these are both squares, then what is to be done with the rectangle? If this were true, that the half square *is* the square, then when one sees the rectangle from here on, they would then wrongly assume that it is the half square, which does not exist, despite it being the rectangle, which does exist and *is what it is*?

Of course, it is silly to think that the half square is not actually the rectangle, for *it itself expresses* the existential substance of the rectangle; yet, this is what has happened with the twelve tone octave, which to many people is musical experience, the other pitches not being considered worthwhile at all, and this then develops into the second problem of octave division: one is creating something that is mutually exclusive from the octave's holarchy and assuming that the mutually exclusive octave is *what is*. As it is so that the frequencies in the division exist within the holarchy, but the frequencies within the holarchy do not exist within the hierarchy, those in the hierarchy are granted unfound privilege over those otherwise found in the holarchy, one which is unduly rewarded.

The idea of a division immediately assumes that derived objects are different, for they are the results of an object being divided into

two or three separate objects, and that point of division means that these objects cannot exist at once, but as mutually exclusive entities; take a key, which, according to its division, exists alone, not among any other keys, which, if they appear later, also appear on their own; yet, this is something that the frequency spectrum does not differentiate, and there are no exclusive entities or subsections that exist only in certain configurations and disappear when others are put in place. Therefore, when a division occurs that removes pitches from the unified harmonic field and places them in a position of artificial superiority, there is then the dilemma of otherness and a forced compartmentalization that leads to the development of the poorly defined idea of the microtone.

This notion of the microtone is a completely preposterous idea that is only applicable when one divides the octave and defines a hierarchy. If one makes a list of all existing cent deviations within a general octave space, including those small enough that our ears do not perceive a deviation from the adjacent pitches, one will find several tones that essentially exist as relatively equivalent to the equal tempered pitches we have chosen. These are wrongly called microtones, a name that defines a pitch as outside, a distinction which would otherwise not be applicable if the same tone were to take the place of its equal tempered equivalent, e.g. E+0 being the privileged pitch transforms E+1 and E-1 from frequencies that are perceived as essentially equal to E+0 into pitches of lesser value that, when placed in their natural context of adjacent to E+0, become microtones; however, if E+1 were to take the form of the privileged pitch, then E+0 would become the microtone. In contrast, if these three pitches occurred at different times, as equivalent pitches, not in the context of one existing exclusively and the remaining as exterior pitches, then they would all appear as the tone E itself, as they should be. James Tenney applied this in several pieces for multiple harps tuned a few cents apart, such as *Harmonium #3* (1980) and *Changes* (1985), in which the relatively equivalent pitches never occur at the same time so that the listener does not differentiate between a series of pitches like E+0, E-14, and E+14 as a series of microtones, but as all equivalent to E. Tenney refuses the listener to hear any beating phenomena that otherwise would define microtones and proves the pitches as equivalent, creating a musical structure that does not dissipate, despite the tunings, which in other situations would be deemed irreconcilable.

Therefore, what one does through division is approach truth, but then re-word it so that *what is* quickly becomes *what is but must not be*; it is to say that two pitches relative in frequency to the equal

tempered E are truthfully tones, but in definition, according to how we comprehend and categorize the sense experience, these two pitches are microtones, and they are placed in a state of otherness because the understanding of the system places ungrounded privileges on the equal tempered E over any other pitch that is within the range equivalent to E. This fundamental misconception in the creation of hierarchies from a holarchy is fed by the twisting of words, which can contort what is true into what is not true rather quickly:

*Henceforward learn the opinions of mortals,
giving ear to the deceptive ordering of my words.
Mortals have settled in their minds to speak of two forms, one of which
they should have left out, and that is where they go astray from the truth.*

(8.51-54)

Thus we must discuss a somewhat tangential topic, but one of great importance for the remaining sections, in words and language as the twisting of truth. What Parmenides' goddess expresses might be better understood in this manner: a thing defines itself, *it is what it is*, but if it does not define itself or is unable to define itself, if *it is not*, and then it is the burden of language to define it. Therefore, 415Hz is 415Hz, the very existence of *it is* is what *it is*, and it can be no other thing; yet, A as a pitch itself cannot definitely define itself, for any sound close to an A could also be A, and A is directly determined by how one chooses to define it.

Thus we can find it true that A can be 415Hz, 441Hz, and even 432Hz, because these all fall under the same definition of what A is to us according to how we ultimately perceive *what is but is not*, perhaps at the detriment of *what is*. A becomes a cipher for a variety of things that are distinct, yet relatively equivalent because it can encode a specific meaning in any musical practice into a compact form of notation, despite differing intonational or tuning standards; yet, though that which defines it does exist, because it must be defined by something that it is not, A does not exist at all, as it has no substance that can define it outside of that fabricated by man. When you ask someone to play A, their response will be whatever frequency their musical society has defined A to be, but they can never say what A actually is without resorting to a frequency, because A does not have any essence outside of what we decide that cipher to represent; thus, because A *does not exist*, we cannot express A without expressing a thing *that does exist*.

There is in language, and especially so in musical language, a great conundrum in that words, sentences, and definitions have no true

substance, but they are used specifically to imply the substance and qualities of things; that is, they do not truly exist, but have been created from nothing to convey things that exist in a more abstract manner than pure physicality. It is much easier to discuss a square if one creates words to define the substance of it as opposed to trying to grope around with the physical thing itself, and instead of having to build or draw the square to express that it consists of an object on a two dimensional plane with four equilateral sides, we can use those very words that were created to define it, for it is as the goddess remarks:

*It is the
same thing that can be thought and for the sake of which the thought exists;
for one cannot find thought without something that is, to which it is
betrothed*⁶.

(8.33-36)

However, language, precisely because it does not exist, is entirely relative and can be twisted so to describe a variety of concepts with even one word, and many words can describe a single concept, because as long as *it is not*, then it does not have a definite existence and can mean whatever we wish as long as what it means exists; furthermore, in the loaning of words, we can use the knowledge of another language to define things for which there is no possibility for defining with what our language is capable of.

Yet, the problem that arrives from greater and greater linguistic permutation is a further distancing of the words we use to define something with *what is*, and the further one goes, the more likely it is that the things that we begin to discuss have no actual existence, because we have reached a point where we can assume that the words we have created do have enough substance to exist alone, without any outside thing attached to it.

Thus, we know $415\text{Hz} = 415\text{Hz}$; we create A as to say $A = 415\text{Hz}$; we define the idea of a pitch, which is to say a *pitch = A*; we place the pitch within a structure, such as *an octave = series of pitches that repeat*; we place that within its own structure as *a scale = a defined set of pitches within the octave that repeat*; and so on until we, having created, at our own will, a system from the truth of 415Hz , have abstracted musical ideas so far from 415Hz that *what is* is no longer a conscious factor of our musical experience. It can still be so that $A = 415\text{Hz}$, but in the systems we fabricate and how we write them down,

⁶ Gallop: "For not without what-is, on which [it] depends, having been declared, Will you find thinking"; McKirahan: "for not without Being, when predications have been asserted of it, will you find the cause so as to conceive of it"

there is no notation that expresses each time a *pitch* = A that $A = 415\text{Hz}$; rather, because we have moved to a point where what is important is not the specificity of a *pitch*, but its equivalent point, a *pitch* = A, can simply be whatever the person who decides the tuning of the instruments wishes it to be, because A *only has to equal* A to be correct in the language we have devised. A pianist who does not tune their instruments, but allows another to do it, does not know the frequency of A, and they do not believe they have to know as long as they and the tuner agree that the resultant sound is A, and that resultant A is equivalent to the A in the score. Thus, the tuner might understand A to have a definite value, $A = 445\text{Hz}$, but to the pianist, whose abstracted musical language only requires a key to be pressed when the score calls for it, $A = A$, and the value is ultimately unimportant, because their object of value is not the frequency, but the key that must be pressed.

It is because our system as a cipher is artificially separated from its source that we can create something that distances our actions from directly causing a frequency, such as the touch of a key we define as A, and express that the key is truly A, even if it is not. As the string of a keyboard is tuned as if an open string, and no other positions on the string are stopped, we artificially limit our connection to the frequency spectrum by accepting each string as *only one thing*. It is true that we could tune that key to $A = 415\text{Hz}$, but if we came together and decided that $A = 264\text{Hz}$, then there would be nothing stopping us from deciding that because, even if it were so that we had decided earlier that $B = 264\text{Hz}$, we are not changing the essential existence of 415Hz or 264Hz in the strings themselves, only the ciphers that we have put in place, which mean nothing unless we ascribe some sort of meaning to them. The keys for A and B could both be tuned to 264Hz, but that would not stop us from defining those keys as what they are to us, A and B, even if they are substantially the same frequency, because the layout of the keys is abstracted from the actual frequencies they represent, their names defined by the standard tunings they possess when the keyboard is constructed, but those names not being important in defining what the actual frequency of the string is. If we were to talk about A without ever defining it, if it was just a symbol on the page without a meaning, then we could not talk about A because A could not be expressed. In Cage's *Sonatas and Interludes* (1946–48) one cannot speak of A as anything other than as the name for the key that is often equivalent to A or a symbol for A, whatever those definitions mean, in the score, because it is simply a direction to hit the key known as A. It, as a symbol or direction, has no meaning because its

meaning is undefined. In fact, Cage supplies preparation instructions, but the preparations are not equivalent to something real like expressing $A = 415\text{Hz}$ because the preparation instructions on paper cannot mean anything. It is true that they direct one to place a screw somewhere as a means to the *resultant sound*, but they cannot *speak of* or *express* the *resultant sound*, it being determined by how the performer prepares the piano through what resources are available. Even if the sound is not $A = 415\text{Hz}$, but an inharmonic, percussive frequency, because that inharmonic, percussive frequency is not defined by its cycles per second, something that one can know is real, one cannot really know or express what it sounds like because there is no real frequency to define. The consequence of this is that ciphers, instructions, and symbols are directions *for expressing* something, but *cannot express* anything without *an existent thing to express*. It is just like the idea of notation for organ as tablature, for the moment you alter the resultant tone of a keyboard, you can no longer say that your cipher for A is truly $A = 415\text{Hz}$, and thus it fails you.

Consequently, the way of truth can only be found in language if we define $A = 415\text{Hz}$ so that we then we can talk about 415Hz while only having to talk about A, because not only is 415Hz real and can be expressed, but we can agree that $A = 415\text{Hz}$; yet, we can, as we have, agree to change the meaning of A to $A = 264\text{Hz}$ at any point in time because it is real, can be expressed, and we have agreed to it, and it is in fact true that we have done this countless times before without any problem, for, even though we have changed the meaning of A, we have always expressed it in the form of *what is*, be that 415Hz, 432Hz, or 440Hz.

Therefore, the capacity of the language to express ideas beyond *what is* means that one can use it negatively to construct from nothing things that do not exist, as we have seen Parmenides' goddess warn prior. Because language is not tied to truth, as it itself is not true but constructed to facilitate the communication of truth through the coining of words and definitions, we have the concept of these pitches seemingly being real things, within a seemingly real structure, defined by seemingly real principles, the totality of which could never exist without a complex language built around defining things in such a way that they could be viewed as *what is but must not be*. If our language remained simple, we could only communicate with the sound itself and could have no way to convey anything outside of the substance of the waveforms, and if we tried to express the pitch A, without language as definer, we would only be conveying the equivalent frequency. Language can always act in a manner contrary to truth if it itself, not the substance it conveys, is used as the

argument. Furthermore, the definitions that we create, if they are treated as absolute so that they always express what we can argue, and thus believe, can lead us to fall astray. The very fact that someone can express that they have “perfect pitch” means that their musical society rests upon a betrayal of *what is* in favor of *what is but must not be*, for one must be properly exposed to a certain series of frequencies to foster a sense of what pitch is “right” to the point where any deviation physically bothers them, even if that deviation is true acoustically.

Thus, what has happened in language is that the ease of it as definer and the strength of its fully developed rhetoric limits our ability to reason outside of the language we understand, because our language is constructed to convey things that we perceive, even down to the fact that the characters that make up language are meant to convey how we perceive the sounds we make; consequently, the more we are reliant on language to define things, the more likely we are to either misconstrue other forms of language in translation or completely miss the root *what is*, for the things that are perceived and conveyed in another language or in *what is* may not be perceived or conveyed in our language, which may frustrate and bewilder us, as we cannot fundamentally understand these things that exist because we are trapped in a frame of mind facilitated by something that *does not exist*. It would be as if we were to try to communicate a future statement with someone whose native language did not possess any future tense, and this can be seen in the results of tonal theory being taught as the only language, which only leads to a musical society in which one can only view a thing through the definitions they have been taught as opposed to *what is*. Thus, a student of tonality becomes bewildered when things are not expressed in the manner in which their language conveys they are expressed, as experienced in the unending disrespect to Schoenberg’s music over their inability to properly parse its musical language. Even something as simple as medieval modality is viewed through the lense of chords, progressions, and major or minor because they cannot understand what it actually is. If they hear a chant written in 900 A.D. that features a melody with a seemingly triadic pattern, it does not mean that the pattern was written, or understood by those at that time, as the harmonic outline of a triad, as they might interpret it; it is instead so that their language is so specified and abstracted to one end that it cannot properly express the foreign things they are experiencing, thus they grope around seeking something familiar and believe that their language can properly express that of another.

Ultimately, what we can find in the failure of language is a failure

of understanding root *what is* in favor of understanding how *what is* is defined. With language one does not need to physically see a square to know what is, because the definition allows one to picture it mentally, but the knowledge provided by language cannot act as a substitute for the knowledge of *what is*, for what the language proposes can be ill conceived, incomplete, or incorrect. Therefore, returning to the initial topic, if we understand the frequency spectrum as *what is*, and the division of the octave as the development of a language, *what is but must not be*, then we might find that, just as knowledge of A is not the same as knowledge of 415Hz or 440Hz, knowledge of the division of the octave into twelve tones, or a division of any other kind, is not the same as knowledge of the totality and indivisibility of sound within the frequency spectrum, and all these things, when undefined by language, cannot be given a higher priority than any others; rather, it is so that a world without a language can properly convey truth, because nothing is determined by how we choose to name, define, and convey it, but those things are determined by what they actually are, which, in the case of musical experience, is that all is indivisible, interconnected, and intrinsic to the existence of all other things. The topic at hand can function in two manners: there is the contrast between indivisible vs divisible, in which the difference is whether or not the contents form a perfect whole that cannot be split or if it can become two exclusive entities that can exist independent of one another, and hierarchy and holarchy, in which the structure can either be considered a unit in which certain points are privileged over another or is a cohesive unit in which all points occupy an equal status.

WITHOUT CHANGE

Moreover, it is immovable in the bonds of mighty chains⁷, without beginning and without end; since coming into being and passing away have been driven afar, and true belief has cast them away.

(8.26-28)

⁷ Gallop: “Moreover, changeless in the limits of great chains”; McKirahan: “Further, it is changeless in the coils of huge bonds”

What is necessary to state immediately is that, because the frequency spectrum that contains all pitches had already been understood as indivisible, unable to be removed from itself without unraveling its very substance, it must be so that it cannot change in any way, and that this point, as well as the two related to it, motion and time, are unquestionable in terms of the frequency spectrum and acoustic phenomena.

Imagine it in this way: the frequency spectrum *is itself*, it possesses an essence, the waveform, that cannot be mistaken for anything else other than *what it is*, but the frequencies that we understand as within the spectrum are defined by their properties, which are the manner in which the waveform vibrates, its cycles per second. This being known, if it changes by +1 cent, is it still the same frequency, or does it change to a new frequency; moreover, can it change to a new frequency, is it that new frequency itself at that point, or are both frequencies the same object with different properties?

These questions of change are rather tricky, not because they deal with the problem of whether or not they constitute a beginning and ending, but because if they can become something *other* than the thing that *they are*, so that what exists is not unchanging, but fluid and unstable, so that you could never step into the same river twice; thus, arguing for change requires one to accept that the thing that exists can transform into something else that exists without ever negating the thing that it was in confirming that it is the thing that it is.

Of importance for this is a fragment of Melissus of Samos, whose work effectively elucidates Parmenides' position on what constitutes change, and thus why he believes change cannot truly happen:

This argument, then, is the greatest proof that it is one alone; but the following are proofs of it also. If there were a many, these would have to be of the same kind as I say that the one is. For if there is earth and water, and air and iron, and gold and fire, and if one thing is living and another dead, and if things are black and white and all that men say they really are,—if that is so, and if we see and hear aright, each one of these must be such as we first decided, and they cannot be changed or altered, but each must be just as it is. But, as it is, we say that we see and hear and understand aright, and yet we believe that what is warm becomes cold, and what is cold warm; that what is hard turns soft, and what is soft hard; that what is living dies, and that things are born from what lives not; and that all those things are changed, and that what they were and what they are now are in no way alike. We think that iron, which is hard, is rubbed away by contact with the finger; and so with gold and stone and everything which we fancy to be strong, and that earth and stone are made out of water; so that it turns out that we neither see nor know realities. Now these things do not agree with one another. We said that there were many things that were eternal and had forms and strength of their own, and yet we fancy that they all suffer alteration, and that they change from what we see each time. It is clear, then, that we did not see aright after all, nor are we right in believing that all these things are many. They would not change if they

were real, but each thing would be just what we believed it to be; for nothing is stronger than true reality. But if it has changed, what was has passed away, and what was not is come into being. So then, if there were many things, they would have to be just of the same nature as the one.

(8)

What Melissus makes an attempt to point out is that what is important in how one views change is how they are viewing it; that is, whether it not they are making the error of mistaking the *property* or *quality* of something as its *essence* or *substance*. This essence or substance represents the existential truth of something, being innate in such a manner that it defines itself through those things, whereas the property or quality of something represents aspects that are not intrinsic to the existence of something to the extent that they can change without ever changing the thing itself.

Thus, one can see and believe that properties constitute change, but it is more likely that they are incorrect, for it is because one can still understand gold to be gold and iron to be iron, even when molten, that the change of quality cannot deny the changelessness of something *that is*, because the essential substance has not disappeared in the process; that is, both still possess their essential aspects, as understood through their atomic numbering on the periodic table, despite a sensual transformation: molten gold still represents 79 and molten iron still represents 26.

In contrast, the transubstantiation of an object, an actual change of the essence of a thing, e.g. iron to gold, is physically impossible because there can be no thing that is not the thing that *it is*. Change cannot happen simply because something cannot be anything other than *what it is*. To think otherwise would require a state of transformation that denies the continual existence of the materials which would otherwise be the case, such as those substantial expressions in atomic numbering, which would require the 26 protons in iron to somehow become the 79 in gold, and, through this seemingly impossible transition, would put out of being the substance of iron and put into being the substance of gold.

Another, perhaps more socially relevant, way to view it is the contradictory notion of a human dying and becoming a ghost, for this implies the essence of the human is transformed into the essence of the ghost. Simply because one is dead does not deny the existence of the body, even when it rots away, for even in death the thing must exist because it had existed prior. As always, *what is*, even if it is not physically experienced, possesses the ability to exist, just as one cannot deny the existence of a human that lives far enough away that one does not see or meet them, but because the existence of the body

can be understood and conveyed, and we have true knowledge of it because *it is*.

The substantial nature of the ghost is not its physicality, that it truly infiltrates our lives, but that the ghost exists as *idea* and manifests itself through the perceptive faculties of the one who holds that idea. The ghost truly exists because a body, when dead, continues to live within our memory as the idea of that body, disembodied, and it is perhaps our unconscious desire for its physicality to prove that idea of that body is not simply memory, but a physical thing, that allows for us to perceive and interpret events around us as the ghost in our memory as a physical force. The ghost *is not real* because it is a product of our senses, yet the ghost *is real* because it is the *idea* of a dead body, disembodied, which can be understood and conveyed, whether or not it truly is physical. Thus, when we believe that the Lizzie Borden house is haunted, our experiences, our perceptions of our journey through the Borden house, are altered by these ideas, spread through the newspapers to create a national trauma, a trauma driven by the memories of heinous murders, even if one did not personally experience them; consequently, our perceptive faculties change our experience of a place so that it is not merely mundane, but is frightening, as in the cases of those who voluntarily explore abandoned buildings with the perverse notion that because something is abandoned that it is cursed or unwelcoming, that there will be something foreboding about a factory, despite it not having any paranormal incidents, simply because we perceive an empty building to be without the mundane experiences we would have if it were inhabited. Nothing actually happens in a walkthrough of the Winchester Mystery House, it is rather the expectation one has, based upon the story of Sarah Winchester's insanity, that the house is somehow haunted or paranormal; indeed, if the Winchester mansion were built by a congenial eccentric, as if it were Edward Leedskalnin's Coral Castle, then one would not be expecting paranormal experiences at all, for the focus would not be on the idea of her building the house to deal with malicious spirits, but on her building the house for the sake of creating something.

It is so that, because knowledge is rightfully an expression of *what is*, and that memory is the result of our fleeting perception of knowledge, which can easily become what is not, that the consequences of these two interacting is that our knowledge of the body exists, and our memory of, *the idea* of, the body exists, but they do not interpolate. The *idea is*—Lizzie Borden *killed her family*—but the memory, which is a perception of the *idea*, *is not*—that because

Lizzie Borden's crime is so despicable that her home is *haunted* by the spirits of her family, unable to leave this earthly plane—because I must convince myself, without existential proof, that the memory is *true* and not simply an *illusion*—that the Lizzie Borden house is haunted, for cold shivers were *felt* as I thought about the murder on my tour; yet, despite this I cannot transform iron into gold, and a body cannot become a ghost. It is impossible. I can *believe* it, but *my belief cannot be proven*.

To return to the initial argument that nothing can change, despite what we believe change to be, the idea of timbre is not that there are specific sets of frequencies that account for the difference in tone quality, for the essence that makes the frequency *what it is* still exists in each instrument's sounding of the pitch, but that the properties of that waveform have changed according to the vibrating body, and perhaps through the technique applied. Two timbral experiences of the same frequency seem different, but because these timbral differences are properties, not substance, they are, in essence, the same frequency, despite sounding different.

Thus, to place it in simpler terms: if one provides, in order of their change of properties, three objects: a square, a square with rounded edges, and a round square, in the transformation of the square to the square with rounded edges no change has occurred, for both possess the same squareness inherent within the square that exists; yet, in the case of the final object, to become round is impossible, for not only does it denote a circle, something that exists exclusively from the square, but the round square does not possess any of the squareness that makes up the substance of the square that exists, and one who views the round square will not speak of it as a round square, but as a circle, for that is *what it is*.

It can be said that an instrument is like a square: it might be that it has one or two properties changed, but *the thing itself*, a vibrating body, does not change; consequently, we find that a square, a square with rounded edges, a green square, a square outline, a square with a black border, etc. are all the same thing, a square, but their properties change its appearance without ever denying its existential truth, unlike a square cut in half or a round square, which deny that they exist as a square as it is known to exist. Thus, it can be said that a horn, a string, and a pipe all possess the same quality as objects that vibrate and create the same wave, but do so according to their physical properties without denying the equality of the frequencies shared among them.

Moving on, concerning complicated things that are created from multiple things, these too are not the results of the change of any

inputs, for, even if one melds iron and gold into a synthesis of the two, say if the result is 30% iron and 70% gold, the two things do not change despite being subsumed into a new material, because they are still essentially there in that percentage. The synthesized form, despite being a thing itself, cannot remove from existence those things that already exist, and should be seen rather as a unification of the substances; therefore, a combination of things is still intrinsically those things in combination, and is not something new, as if created from nothing—which is contrary to the misconception we create when we choose to name the combination as if it is a new material that somehow did not exist prior—but something that expresses the the things that comprise it. One cannot say that the ingredients that go into the raw dough for the baking of bread have disappeared in the mixing of the dough, or even that dough and bread are different things, for they are both the synthesis of a series of ingredients that exist within both forms, despite the appearance of a change in the mixing and baking process. No matter how much that which appears changes, the same portions of flour, water, and yeast exist in all forms, despite the name that one gives the products.

In the example of the body provided in the section on the question of generation, one understands the body as the full thing in itself, which, as the sum of a group of things, is given the name of “body” by us, but is existentially a conglomerate of many things that make up a general “body,” those things being organs and genetic makeup; thus, as the example of a specific body, one that we know by the name given to it, e.g. George Washington, results from a certain combination of certain things that exist in the form of specific genetic material, and this is the manner in which one can understand the phenomenon of harmonies: there is a general harmonic “body,” which is a combination of many things that make of a general “body” of a harmonic waveform; however, the undefined harmony is simply any series of things that make up the “body of the harmony, but in harmonies that we value, differentiate, and thus name, like the body of George Washington, are the result of a specific combination of specific material, not simply a general idea of what makes up a harmonic body.

Thus, through the musical language of tonality, as in the earlier example of an equal tempered C major, a unique embodiment of *specific* frequencies, the result of the combination of specific tones would be different if modified by even one cent, which it would then be a harmonic body, but not the one we know as an equal tempered C major, just as a George Washington with different genetic material, as to alter the shape of his nose, would not be the George Washington

we know. Yet, of course, these are names, definitions, and the difference between one C major and another C major, or one George Washington and another George Washington is not as much as the differences we place upon them, for both are ultimately conglomerations of individual material to form a harmony or body, respectively, but the things that comprise it, are still their individual, essential things, without ever having to change or transform into the state of being a body or a harmonic structure.

Therefore, one cannot say that a frequency truly changes into a different, separate frequency because the frequency spectrum is known as indivisible, which implies that all the pitches are the same objects that share the same substance, this case being waveforms. Thus, the only true differences are the properties of the wave's vibration, and these have nothing to do with its essence because none of these, across any difference of timbre, possess different substance than any other; indeed, one can hear the equal tempered A from a violin and a horn and know they are the same, and the composite wave encountered when each plays the equal tempered A an octave apart is clearly one composite sound, not two separate sounds combined into a new one, so much so that if any shift or change is perceived, then that is the problem of the senses alone.

Revisiting Melissus' example, molten gold appears to have undergone a change because one sees its qualities as different, yet if one reasons of molten gold, without witnessing it, then one might then not perceive any change whatsoever, for it is still gold, no matter the state. If we are to understand why change is believed to occur, it is easier to understand change as a process undergone in one's view of the world as opposed to something that actually takes place, thus, things appear to shift and transform because we convince ourselves that they are, and change is then an illusory experience; consequently, if change of things that exist truly happens, then all those things across the world that possess that substance would also have to change with the thing, for the change of an existing object requires the change if its existence. When the square's edges are rounded, we can see it and say, "yes, they are different, it truly has changed," but if we question this idea of change by defining the substance of the square and then comparing it to that of the square with rounded edges, we might find that there is no reason to believe in any form of change, because *what is* has not left any state in which it otherwise no longer is *what is*; yet, if we are to take the same substance and compare it to that of the round square, then we have to come to the conclusion that the round square cannot be the square that exists because the essence of the square that exists is missing, but the essence of the circle that

exists fits the substance of the round square in such a way that it can be nothing other than the round square.

It is so that the qualities of the round square imply that the square must be something that is incongruous with its substance; that is, if the square's substance is already known to be two dimensional with four equilateral sides, how can one then look at the round square and say that it is a square if it does not possess the four equilateral sides? The existence of the square would have to change to become the existence of what we know as the circle; yet, if the circle already exists, the round square cannot also exist, because, if it possessed the essence of the circle, then it must be a circle, not a round square. The opposite can be said as true for frequencies, the qualities of 415Hz and 440Hz are completely compatible with one another's substance, the waveform, just like comparing the square to the square with rounded edges, and it can be said that each frequency is not a change from one to another, but the same thing vibrating at a different rate.

Knowing that frequencies and pitches are simply all expressions of *one* thing, ungenerated, indivisible, and without change, truly united as *being*, we can finally step away from the question of acoustics and enter the realm of aesthetics, which builds upon the three previous arguments, beginning with the idea of dividing the octave; for, if the octave's substance is the amalgamation of every cent or hertz deviation between the octave points, how can one then create an octave with the quality of twelve tones if it directly opposes the existence and attempts to change *what is*? The apparent substance of the twelve tone division of the octave has already manifested itself within the frequency spectrum, and those things cannot be applied to anything else, because then one must deny their existence in the spectrum or the existence of the pitches that lie outside the twelve tone division, just as one would have to deny the existence of the circle to confirm the round square; therefore, it is only through the work of language and exterior definitions that one can define the twelve tone division of the octave, as language can be used to deny the existence of something through rhetoric, something which is quite fitting, as a tuning is something of an argument in itself; for, in the very delineation of a tuning one understands that, for some unknown reason, these divisions are treated as truth, and all others are falsely removed from being, their intonation becoming "wrong notes" or "poor playing," thus they must make an argument to sequester away the existence of other tones. Tuning, and the systems it develops, is essentially an aesthetic sophistry, an application of Protagoras' "Man is the measure of all things" in its definition of something as absolute, but the reasoning for that absolute truth not being *what is*, but a

series of well defined arguments meant to sway the listener.

The way of seeming then becomes not simply a question of perceptive facilities, what one has the ability to see or hear at any time, but also one of perspective aesthetics, what one chooses or desires to see or hear; therefore, it can be expressed that the quality of beauty is not inherent within the object, but whether or not one perceives the beauty of the object, and according to this, if one does not perceive something as beautiful, then it cannot be the correct path, the only validity of that path being that it is one deemed correct. Consequently, the romantic and the natural are not equivalent: the path of nature as beautiful is fundamentally different than the path of nature as true, and to single out beauty as above *what is* is quite different than the notion that truth leads to beauty; that that appreciation of *what is* allows for an appreciation of beauty. In a romantic framework, one transforms something into a beautiful sublimity. Thus, the ugliness of truth is not considered beauty, but an aesthetic perspective of that ugliness in the grotesque or macabre can be expressed as beautiful in its sublimity. It is so that the romantic is not so much interested in ugliness as he is in a sort of beautiful ugliness, and it is akin to the difference between Vasari's gothic—ugly in its backwards, barbaric nature—and Ruskin's gothic—beautiful in its ugly, grotesque exaggerations of the natural world.

This aesthetic transubstantiation of the object can be seen in other architectural forms. It can be said that Bauhaus designs are not necessarily focused on aesthetic view of beautiful or ugly, but on the functional need of the object that would determine the form, which is opposed to the prior Art Nouveau designs, in which a beautiful form is primary over the functional need. Bauhaus designs are drafted in such a manner that they possess no aesthetic traits, but only "truth" in logical forms through primary shapes; however, to the perceiver there is a definite value to an object aesthetically, even if the aesthetic role of the object is ignored by its designer, because when the perceiver perceives, they perceive according to their own cultural, societal, or personal perceptions. The object of the perceiver is given value not by the merit of its function or the status of its designer, but of the perception of *it alone*. Therefore, in another context, Brutalist architecture itself is, in its social function, meant to be above aesthetic concerns, but the viewer cannot view the object as *it itself*, as a thing that serves a purpose as a building, because their interest in the object is not its function as a building, but whether or not the object's aesthetics line up with their own. If the aesthetics do not line up, then the dissonance—which we should note that the very existence of which is primarily created by the perceiver, not by the object they

perceive—becomes far too great for the perceiver to handle. The value placed upon the object by the perceiver is not its practical use, otherwise society would view Brutalist architecture as favorable as the city planners do; rather, it is not so much that the thing is innately ugly or beautiful, but the viewer perceives that its essential nature is as so; therefore, though the substance of the thing cannot be changed, for that is *what it is*, the way in which one views the thing can create a perceived ugliness, and it can also transform that perceived ugliness into a perceived sublimity, as found in the difference in the Japanese and Chinese sense of aesthetics concerning something as small as a bowl in the difference between the perception of Raku ware and celadon. Both are the same thing, a bowl, and they both serve the same functional purpose as an object, but their qualities are different in such a way that one can perceive them as different and choose one over another despite their essential equivalency. To a certain aesthetic view, the Raku tea bowl appears as quite ugly and malformed in comparison to the assumed purity of celadon, but, through Sen no Rikyu's aesthetic perception of the Raku tea bowl, it becomes as beautiful as celadon, perhaps even moreso. The *essence* of the bowls do not change, but the manner in which one approaches them does, and Rikyu uses his own personal perceptive aesthetics, language, and rhetoric to define and qualify this sense of beauty; even though he cannot change the substance of the object, he can talk his way around it, so to speak, as to change the minds of those who would either otherwise view it as ugly, or simply ascribe no view to it at all.

It might appear as if this is unrelated to the topic at hand, but it is important to express that this method of ascribing beauty to the object is to change it without actually changing *what is*, that is to say that the change is in perception, as seen in Melissus' example of the change of perception of gold when it melts, but this change is not simply the physicality of object, but the value placed upon it.

This aesthetic subjugation of the object is deeply troubling because the polemical attitude it develops attempts to dissuade others from perceiving how the *object expresses itself* as opposed to how *they wish to express it*. If I may be able to return to the subject of architecture, a prime example of this aesthetic subjugation is the way in which Mussolini's EUR district in Rome is used by both fascists and anti-fascists for polemical purposes. Mussolini is primarily at fault, because his argument in the stripped down, modernist neo-classicism is that Italian fascism is an attempt at recovering the triumph of Roman culture, but expressing that it is a product of the new sleek, industrial era that the futurists were important in promulgating; however, the anti-fascists, instead of doing what is

right through denying any aesthetic superimpositions, which would neutralize the politics, erroneously respond to polemics with polemics, and they attempt to use Mussolini's own aesthetic arguments as a reason to express that Italian fascism is a sort of sterile, ineffectual copy of the Roman Empire.

Both of these aesthetic arguments attempt to nullify the objects' expression, that they are buildings, and that their *essence* is that they are objects that house objects, and nothing more. Something like the Palazzo della Civiltà Italiana is, objectively, an aesthetically detached, geometric shape with an ingenious use of arches that creates different effects depending on the angle where one stands to perceive the object, and, if aliens appeared without any political, historical, or aesthetic knowledge of the Palazzo, then they would only experience the object expressing itself through these physical traits. It is unimportant what the perceiver *believes* an object represents, or what another attempts to *convince* the perceiver what an object represents, and it is instead paramount that they perceive how the object *portrays itself*, the *essence* of the object, *what is*; for, the object is, at all times, expressing itself, even if there is nothing to perceive it, and when it expresses itself in that situation there is no difference from the situation in which it expresses itself within the presence of a perceiver. The object should not need to prove anything about itself to the perceiver, because the object is what is, and it is instead that the burden of properly understanding the object is on the perceiver; therefore, if they are to perceive it to be *anything else other than what is*, then the blame can only be placed upon the perceiver.

The primary importance of this example is that it illustrates a key problem of the history of music and the development of music theory worldwide, not simply that of Western musical culture; for, the theoretical arguments every musical culture develops are founded by the aesthetic subjugation of the object, as a culture's aesthetic preferences decide which structural traits are of value in determining their tuning system, its functions, and its nomenclature, and this puts each theoretical system at odds with one another when the inevitable polemics begin over which manner of viewing music, aesthetically or otherwise, is superior; thus, one finds the nonsense of the arguments that modality is superseded by tonality, that equal temperament is the only useful tuning, that dodecaphony is the only true serious method of composing, that tonality is superior because it is beautiful, that meantone is somehow more expressive, that gamelan is a preferable choice to dodecaphony due to its rhythmic qualities, etc.

All of these arguments are harmful because they are simply a developing series of aesthetic arguments that exist to refute music that

one believes is inferior—regardless of actual technical quality—or a threat to their own musical language; moreover, they are all ways in which one denies the object's *expression of itself*. Musical experience only expresses *what is*, and it does not, nor should it be used for, expressing aesthetic attitudes that are outside of itself, and the beauty of musical experience comes from *what is*, not from some sort of perceived beauty according to individual or cultural aesthetics.

Therefore, when we define *musical experience* as the result of sound and deny the act of perceiving the sound, which requires an aesthetic perception that will change how one views the essential nature of the sound, then it is not about the act of an individual viewing or hearing, but about the expression of the thing they view or hear; that is, if Ruskin's Turner conveys nature through his eye, then Turner is conveying his perception of the thing, but not the actual thing itself; instead, in a painting such as *Snow Storm* (1842), Turner provides an aesthetic transformation of the object so that it is not the object that it is, but the thing the Turner sees it as. The question in viewing *Snow Storm* is whether or not it is an expression of *what is* or if it is an expression of how Turner perceives and aesthetically changes *what is*. It is the same in how Cezanne sees Mont Sainte-Victoire, *what is*, but transforms it in the act of seeing, and, in painting, creates something that *is not*. Just as in the case of the bowl, the perceiver expresses a phenomenological experience of the object, not the object itself, which changes the object in the eye of the perceiver, and that leads to the resulting aesthetic view of the object. If one wished to see the real Mont Sainte-Victoire, then one cannot look to Cezanne; there is indeed an object that expresses itself in Mont Sainte-Victoire, but Cezanne cannot express that, but only his perception of the object that expresses itself; thus, the actual object is outside of his, and, consequently, our perception. Though the object cannot change, the perceiver experiences the object changing in their own perception of it, creating a state of dissonance between *what is* and what the viewer believes *what is*, this being *what is not*.

What I mean to express at this point is that, as we move away from the arguments of *what is* strictly as acoustic phenomena, we must begin moving toward arguments in which *what is* as an acoustic phenomena must be pitted against the perceptual aestheticization of a musical experience; thus, because we know that our perception cannot be trusted, and we cannot trust our experience of anything other than the purity of the the expression of the object itself, we come to the final dilemma of musical experience: that of the apparent nature of motion from pitch to pitch, and that of the experience of

these pitches coming before and after one another in the context of time.

WITHOUT MOTION

*It is the same, and it rests in the self-same place, abiding in itself.
And thus it remaineth constant in its place; for hard necessity
keeps it in the bonds of the limit that holds it fast on every side⁸.*

*Wherefore it is not permitted to what is to be infinite; for it is in need of nothing; while, if
it were infinite, it would stand in need of everything⁹*

(8.29-33)

⁸ Gallop: "Holds [it] fast in the chains of a limit, which fences it about"; McKirahan: "holds it in the bondage of a limit, which keeps it apart"

⁹ Gallop: "Wherefore it is not right for what-is to be incomplete; For [it] is not lacking; but if [it] were, [it] would lack everything."; McKirahan: "because it is not lawful that Being should be incomplete, for it is not defective, whereas Not-being would lack everything."

It is quite strange to argue this point, because unlike the others, which, in any situation, can be true no matter what, how can something fill a space in such a way that it cannot move? Surely, sound moves, correct? An inherent acoustic property is the manner in which sound travels, and that defines how we design our concert buildings. Even beyond the specifics of musical experience thus must be true, and it must be so that any object, even in the most simple example of a body, moves from point A to point B, correct?

Yet, our perception of musical experience is not necessarily in how sound travels in three dimensional space, but how we perceive frequencies to have relation to one another and the change of the quality of the waveform that creates the sense of a line; furthermore, it is whether or not that line is merely juxtaposed frequencies or if they are truly moving from one to another.

It is best to understand the notion of movement in the context of Zeno's arrow, but as there is a great inconsistency among interpretations of the paradox—especially so in that many do not attempt to view it in the context of Parmenides' philosophical axioms—it is so that I must define its purpose. Aristotle's remark on Zeno's paradox, as translated by H.D.P. Lee, is as follows:

Aristotle, *Phys.* Z 9. 239b 5

Zeno's argument is fallacious. For if, he says, everything is either at rest or in motion, but nothing is in motion when it occupies a space equal to itself, and what is in flight is always at a given instant occupying a space equal to itself, then the flying arrow is motionless. But this is false, for time is not composed of indivisible instants any more than any other magnitude is composed of indivisibles.

(Lee 2015, 53)

What Zeno's argument can be understood to mean through Aristotle's summation is that if an object moves, it must be made up of instants of time in which each instant the arrow occupies a different space, for each moment the arrow exists within a space, and does not move from that space, but rather it fills up that space in that moment. These moments, when perceived as a series, create the illusion of motion. If our knowledge of the arrow is purely perceptive, then we do see it as if frame by frame, as atomized time, with the final image stitched together by our mind. Movement can be implied by our senses, but each moment within the perceived movement is comprised of these moments in which the arrow *is itself*. Aristotle believes that the paradox is fallacious because time cannot be divided, which can be seen as completely consistent with Parmenides' argument; however, Alba Papa-Grimaldi notes that Aristotle is far more interested in the notion of the instant, which is

the aspect of the argument that is the least important to Zeno's position, as his interest is in the necessity of the arrow's *identity* as *what is*:

This durationless instant is in fact the effort to conceptualise the identity with itself of the arrow. Whenever you think of the arrow, this must occupy a place equal to itself, this can only happen tautologically in a non-duration (in a framework in which time is change, of course).

(Papa-Grimaldi 1996, 309)

It must be so that the arrow *cannot move* in the same manner that it cannot change, because that would deny *what is*, and *what is* exists in a durationless instant because its entire existence must be a singular, durationless instant, as in the idea expressed earlier that two squares in different locations are not mutually exclusive because the existence of the square that predetermines physicality has no conception of space or time. Zeno's durationless instant is essentially outside of the experience of physicality, thus it cannot come into or pass out of being, and is in line with the concept of *existence as the requirement for physicality*, a concept that is echoed in Plato's Forms, which exist outside of the physical realm, but is it not necessarily a metaphysical statement inasmuch as it is existential. It is with this explanation that Melissus explicitly agrees:

Nor does it move; for it has nowhere to betake itself to, but is full. For if there were aught empty, it would betake itself to the empty. But, since there is naught empty, it has nowhere to betake itself to.

(7)

Thus, to reiterate, if a thing is *indivisible* and *unchanging*, then it *cannot move*, being full, because in each moment, instant, or present, it is in the spot in which it always was and will forever be in that instant, because the point in which *it is* in is durationless, only given duration by perception. If it were not so, then it would have to change, and the existence of the thing must then be understood as divisible, for, if it were truly indivisible, then it cannot exist in forms that can be separated, i.e. firmly existing at either point A or point B as opposed to only being a single point of being that may appear at point A or point B. Yet, in order to actually accept that it existed in two manners, point A and point B, then we would have to deny that the physical space in which an object rests does not define any essence of its existence, that the experience of the physical nature of a thing determines its *essential identity*, returning to a Berkelian or phenomenological experience of the object—our perception of *what*

is, i.e. *what is not*—as opposed to the object itself properly expressing *what is*. If we want to ignore our senses, but still accept that an object moves in three dimensional space, it could be expressed that space is a property or superficial trait, like that of the square with rounded edges, as nothing about the movement in space can change the *substantial nature* of the object; that is, if a square were pushed from point A to point B, nothing essential to the square's existence could have been said to have been changed, because the square's essence is not *two dimensional with four equilateral sides that exists at point A*; indeed, if this were true, then pushing the square to point B would imply the movement of *what is* and a substantial change to the square so that it would be *two dimensional with four equilateral sides that exists at point B*.

Thus, the point of Zeno's paradox is that when one perceives an arrow in movement, they wrongly define the arrow's *essence* so that it is *an object in movement* because they *perceive* it as *in movement*; therefore, their view of the object allows for them to define *what is not*, which is contrary to *what is*; for, it is not we, through our senses, who define the essence of an object, but it is that the *object defines itself*. The arrow *is not moving*, because if it *were moving* then the substance of the object would have to be that *it is moving*, which would mean that it must be an object that is *perpetually moving*, that cannot be stopped and examined, because we would have to remove its *essential movement* to do so. The argument is paradoxical not because it is a brain teaser to prove wrong, but because there is no answer we pose that can actually solve it, as there can be no solution outside of the *object expressing itself*.

Despite this, there are always arguments that mathematical proofs either prove Zeno's paradoxes correct or incorrect, but these "miss the point," as Papa-Grimaldi deems it, for Zeno is attempting to prove Parmenides' natural philosophy, specifically the essence of the things that exist, not a mathematical argument about the movement, speed, or distance of those things; furthermore, mathematical justifications do not exist in any of Parmenides' extant philosophy, and, knowing that Zeno's goal is to refuse arguments against Parmenides, it makes sense that he would apply mathematical arguments to prove that those mathematical arguments are paradoxical so that they neither confirm nor deny the argument, leading one to approach the arrow from a different perspective. Of course things can be *put into* motion, but they can also be *put out* of motion, and, as neither quality can really be existential, as even in space a body in motion always has the opportunity to end up embedded in another body so that it ends up at rest, one cannot say

with certainty that the movement of things is truly the primary factor in what defines their existence; rather, because *what is* must always be defined without determination or argumentation outside of the object, the essence of an object must be *itself*, so that anything exterior to or other than its essence would be *what is not*; take, for example, the humorous point that Diogenes the Cynic made: I took a step, thus I move. Yet, it could be very well so that you could shackle Diogenes to an immovable object and even when taking a step in the same way he would *not* move. The act of taking a step is not an act of motion, but it is rather that the consequences of the step against another object to create the exterior force of propulsion and momentum leads to motion, and the denial of those external factors by another external object can negate motion. One must contest that the experience of motion is one of two conceptions: either a body that, because it is not physically locked in place, can move; or, that the body is an existential object that does not essentially move, but the act of movement can be put upon it. The first requires one to accept that movement is an essential part of the existence of the body; yet, I would argue that motion is not part of the essence of the object, if only because it is this external force on which the object is being acted, and if it were an aspect of its essence then it would be in perpetual motion; thus, if applied to the topic of the arrow, if the object *is not* in perpetual motion, and *can be* stopped and held in one spot, then *its essence is without movement*; therefore, according to Zeno, the arrow *does not* move.

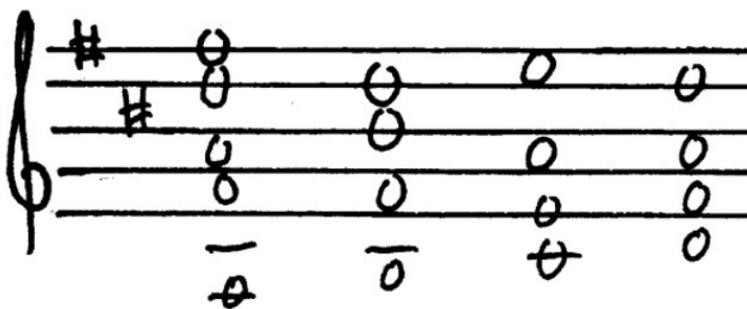
Now, applying this interpretation, motion in musical experience can be argued in two ways: the movement between pitch to pitch to create the feeling of motion in space, and that motion in space creating the feeling of motion in time¹⁰. Both of these are an illusion of change through aesthetic perception, but the former is more useful in discussing the lack of physical movement in musical experience, as the latter is much more suited to a discussion of the absence of time.

Under the umbrella of musical experience it might be expressed that each pitch is within that point in which it resides as a durationless instant, and, as all pitches embody one point, they do not move because there is nowhere to move, being full. The substance of movement must imply that in this instance that there is something empty, something *that is not*, in that durationless instant that must be filled, some sort of point that the pitch must travel toward to

¹⁰ The earlier question of whether music moves in physical space is not of importance. First, as made clear by the conundrum of the arrow, the qualities of physics are separate from existential essentials; second, the movement of sound in the air is the result of the string as waveform vibrating. The actual waveform is static, but the air it acts upon creates the sense of sound moving.

complete it, as if it may put into being *what is*; yet, something cannot be empty, because that would imply that the empty something is *nothing* when a thing *must be something* to exist whatsoever, for emptiness is the state of *no thing*, a state of nonexistence or *what is not*.

In the example of functional harmony (ex. 6), there is an unquestionable argument for motion as the result of perception, for a series of chords have no connection to one another, and this, like change, is the result of an aesthetic perception of *what is*. Like the pitch they are full, and each individual chord is static, because it has nowhere to move, it requires no action to complete it, and has no empty space that must be filled. Thus, each successive chord displays not some sense of linear movement, but a series of points connected by the ear because they share similar qualities, as understood through the proper placement of shared and neighbor tones in voice leading. Moreover, if it is understood already that all sounds are a single waveform with different qualities that determine the manner in which that single waveform vibrates, then it can only be said that there is no movement among pitches or chords and such movement is the result of our perceptive faculties.



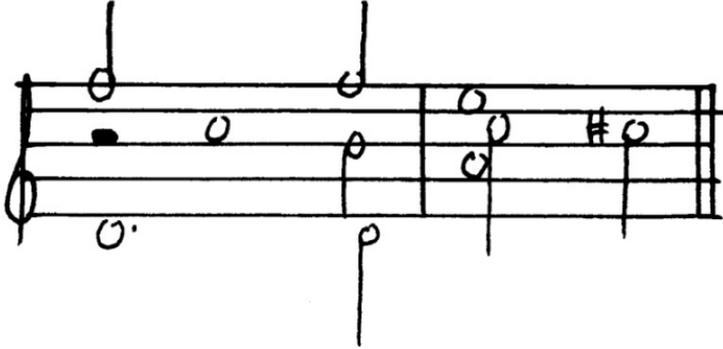
Ex. 6 A standard I-vi-V-I progression

One can tell this quite clearly if they play these same functional progressions with a great deal of space between them so that their ear does not stitch the instants together; for, when a pitch is an island, one understands it as the singular instance without any movement from or to another point, and this is true even if there is a pitch before and after, simply because what was true once cannot be false in another situation without the latter denying the truth of the former.

Yet, even with distance the ears can stitch the chords together, because the listener exerts the desire to tie loose ends. A dissonance or leading tone appears with what seems to be a yearning to fill

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something empty, and that feeling is so strong that it must be resolved through movement to fill that emptiness, so much so that the movement to a resolution sounds complete when placed in comparison to the moment it moves from. Thus, the use of a delayed Picardy third (ex. 7) transforms an otherwise stable cadence into a harmony that, in hindsight, required resolution.



Ex. 7 A delayed picardy third cadence

And this aural phenomenon of the delaying of a cadence making it necessary in hindsight is rather important in understanding the expectation of movement. When one hears a harmonic progression (ex. 6), each harmony exists as an island only until the next harmony appears, which creates the sensation of the previous harmonic experience being incomplete until the following harmony. All harmonic movement is essentially in hindsight, because one cannot connect anything until having an existing experience to connect it to, and once one experiences this for the first time, they come to have the expectation that when they hear a harmony that what follows will have a connection with it. It can be expressed that our expectation of movement, completion, or filling in drives our interpretation of this sort of harmonic functionality, a harmonic interconnectivity, and without these constructions we would be left with music that would float without resolution, such as the airy stasis of the sho's harmonic textures (ex. 8), which do not appear to move anywhere because they are not treated with the same experience of functionality through hindsight.

The image displays two systems of handwritten musical notation, each consisting of six staves. The notation is a form of extended harmonic progression, likely for guitar or a similar fretted instrument.

Left System:

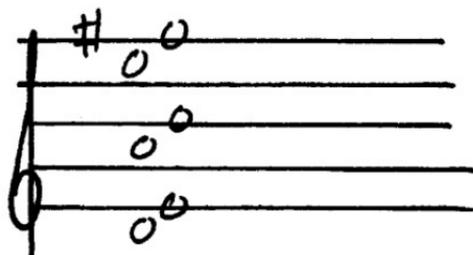
- Staff 1: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 2: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 3: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 4: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 5: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 6: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.

Right System:

- Staff 1: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 2: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 3: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 4: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 5: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.
- Staff 6: Contains notes on the 1st, 2nd, and 3rd lines, with a sharp sign (#) on the 2nd line.

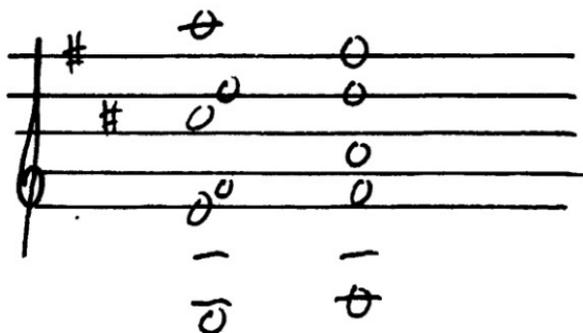
Ex. 9 An extended harmonic progression

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Ex. 8 Bo harmony

Thus, the experience of resolution via hindsight leads to the foundations of tonal structure, in which a functional chord requires the perception that it is *unstable* and seeks *stability*. What one experiences in an extended harmonic progression (ex. 9) is that the more “unstable” a chord is, the more likely one is to experience it needing to be resolved and move to a more “stable” position in hindsight. This is also true of the non-functional chord, which, because it is made up of many non-triadic pitches, is pulling itself in so many directions that it is deemed unstable to the point that it must be replaced by another functional harmony to return to the progression (ex. 10), and when it is replaced there is a feeling of it having changed or moved in such a way that it is finally *at rest*.



Ex. 10 An “unstable” harmony and its necessary “stable” harmony

This aural perception of the stable and unstable harmony is important in the understanding of why we seem to prefer a certain combination of harmonic events; for, when Schoenberg initially argues for consonance and dissonance as the result of comprehensibility, and not beauty, in the *Harmonielehre*, what he proposes is that the order in which the overtones reveal themselves

determines which frequencies that the human ears more readily attach themselves to. Those that appear first become consonant not necessarily due to questions of purity, but because they are the first available, and early humans most likely developed their habits around those things that were more easily available. As other tones become more readily available over time, and listeners habitually engage them, their status as dissonant disappears, thus the rise of the dominant in tonal harmony. Now, this idea of some frequencies being chosen over others allows for the development of a theoretical model for a divided musical structure, *what is but must not be*, in tonality, and the habitual listening of this structure defines what is and is not consonant based on an Ur consonance, e.g. a musical structure determined by pythagorean tuning develops its consonances according to the Ur consonance of the perfect fifth, $3/2$, which is the structural building block of the system. In a tonal system, the Ur consonance is the tonic triad, and the tonic triad presents itself as *the* stable harmonic form; thus, everything else exists in relation to this form and, like how Schoenberg views the overtone series, the gradual degrees of separation from this stable harmonic form creates a progressively developing scale of unstable harmonies. This development is one I have previously likened to in *Prolegomena to Tetrachordal Structure*, in which the notion of consonance is not simply being comprehensible, but being a result of the functional construction of a system, so that all functional harmonic structures, e.g. triads in a triadic structure or the stacked tetrachords in a tetrachordal structure, are the consonant harmonies, not based on whether or not the ear judges them as pure sounding, but by the relative relationship of a harmony's structural traits to the initial Ur harmony. The perception of instability is then created by the distance from the structural aspects of the Ur harmony, in both its construction (a dominant seventh is more unstable because it is not a pure triad like the Ur harmony) and in its content (the more tones a harmony shares with the Ur harmony the more stable it is, but if it shares no tones with the Ur harmony then it is totally unstable), and this allows for one to compare the points as if they are of varying levels of distance. Thus, what we know of where we first began in comparison to where we are now leads us to think that the unstable harmony must move back to where it once was, and it must return to its Ur harmony to be put at rest.

Thus, the stable harmony is treated as the point at which music no longer has to move. It can be a starting point and move somewhere, but there is no need for it to be experienced. A second harmony does not lead one to believe the tonic required movement,

and it is only the second harmony, the first in a series of unstable harmonies, functional and non-functional, that appears to require movement in hindsight. The unstable then appears to jitter about until it reaches its final point of rest, the stable tonic. As in the overtone series, only the first point, which we know so well, and from which we assume everything after is derived, is the point that we see as perfect. By stacking more and more tones that are not part of this Ur harmony, we create the experience of the non-functional harmony as “unstable” as we are limiting our ability to understand where it must go and its relationship to the Ur consonance is muddled. Our habitual listening to tonality informs us that a harmony’s relationship to the Ur harmony is determined by the tones within a chord: if the tones within a chord are shared with the Ur harmony, the closer in relation it is and the more we feel like it must return to the Ur harmony because we can feel its instability in comparison to the Ur harmony; however, if it shares no tones with the Ur harmony, like the triad of the seventh degree of a scale, then it is so unstable that it cannot be said to have the ability to be drawn back to the Ur harmony, as we cannot comprehend its place within the harmonic structure we perceive. Again, as in the case of the overtone series, the further out the frequency from the Ur frequency, the less comprehensible it is to us, because we perceive it according to its relation to the frequencies we *first experience*.

This then leads to the problem of the non-functional harmony, which, like the seventh scale degree, has few or no shared tones with the Ur harmony, and also possess many added tones, including those outside the theoretical structure determined by triadic construction, which seem to muddle it so that it is pulled in many directions and we cannot establish any clear relationship to the Ur harmony. However, unlike functional harmonies, it would be better to understand the non-functional harmony as not *unstable*, but instead *far too stable*; so stable in fact that it exists like the perfect sphere of Parmenides’ goddess:

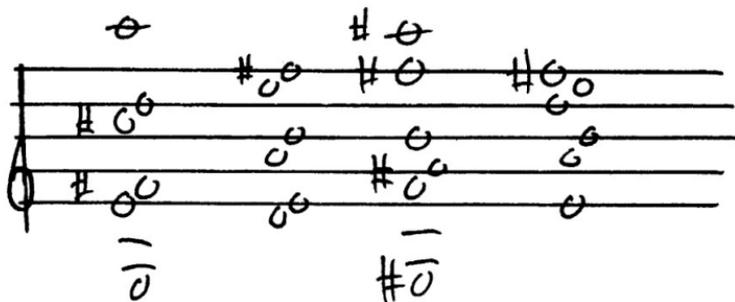
Where, then, it has its farthest boundary, it is complete on every side, equally poised from the centre in every direction, like the mass of a rounded sphere

(8.42-44)

As we determine stability and instability by our perceptive faculties, we misunderstand the stasis that the non-functional harmony represents. It possesses no Ur harmony that we judge a relationship to, and thus it cannot be expected to move, for the experience of

movement in hindsight, as understood prior, requires us to have perceived a tonic, stable tone, that we judge every following tone in relationship to, and then each of these tones are judged in relationship to that which preceded it, which are preceded by the tonic. The non-functional harmony provides one with a conundrum, because it cannot be comprehended according to the rules that one creates through their perception, thus, it can only be understood *as it is*.

Consequently, the non-functional harmony is so stable that, even in our perception, it only exists in a point where it cannot be resolved and it cannot move so any manner satisfying to the ear as in tonality. In example 11, the series of non-functional harmonies do not appear to resolve anything in hindsight, unlike the transition of iv-V in example 6. Its stability is equivalent to that of the tonic chord in that it cannot transform itself or change its position and can only be superseded by a new harmonic structure, and the only harmonic structure that allows for resolution in hindsight is the firm stability of the tonic, if only because we perceive the tonic as the end of all points, even those that have no path.



Ex. 11 A series of “non-functional” harmonies

Due to this view of harmonies as stable, unless we convince ourselves otherwise, this is a looking-glass into the actual nature of a harmonic waveform as *the waveform itself*, not as one of many, but a single thing that may differ in quality, but in essence is stable and static.

And that leads us to a final thought concerning the definition and classification of the harmonic language of tonality: if what we come to know is true, that these harmonies are essentially equivalent in *identity*, they reveal in their names the perceptive transformations of the senses, and language is used to reinforce these conceptions of harmonic functionality so that the names themselves, even without any sound, allow for one to conceptualize movement and change, which the goddess reprimands:

*Wherefore all these things are but the names which mortals
have given, believing them, to be true –
coming into being and passing away, being and not being,
change of place and alteration of bright colour.*

(8.38-41)

And perhaps this is where the question of the creation of motion through the ordering of pitches and harmonies splits into two contrary paths: does the composer order the notes, or does the listener? If the composer is as we generally understand him, that he attempts to convey through the ordering of notes, like literature, *an idea*, then he too can be a listener and can listen for the listener as to tie the ends as necessary. Consequently, we find in the creation of common practice harmony the defining of pitches so that they are understood by the listener as moving between points of varying stability. The listener's perception is not being employed then to stitch everything together, because he assumes that the composer, in the framework he exists within, has already done it. Conversely, if the composer works outside of tonality, then it is unlikely that he is doing the listening to tie up the loose ends, and then the listener will attempt to parse the musical experience in search for those loose ends according to the music language they understand, and they will place things where they must not be, as they are not there to be placed.

Thus, beyond questions of harmony, there too is a great difference between how melody *is* and how melody is conceptualized and perceived; for, when one perceives a melody, they are judging not simply the harmonic value of it, that one begins at the first note, the Ur consonance, and must then end up there to create an aesthetically satisfying experience, but they are also judging this harmonic development in terms of motion. When one expresses this problem in musical experience, it can be understood through the dichotomy of melody and line; for, the line is a non-aesthetic form, an objective series of pitches that take the place of one another at such a space that one perceives them as a single thing, yet one possessing no explicit meaning, and one not possessing any aesthetic traits. The line possesses a stasis understood akin to the waveform itself because it possesses no aesthetics of motion, of seeming to move somewhere based on an Ur consonance; however, a melody is an aestheticised line, being one that is the result of a line being perceived and judged. Just as any other form of aesthetic perception, a melody can truly be defined as an *aesthetic form*, as it cannot simply be a series of pitches that take the place of one another, such as that of the top note of a harmonic progression, or, in the case of counterpoint studies, a

cantus firmus, because a melodic line is defined by value, i.e. in the study of melody there is clearly a certain pattern or form that is considered primary by the cultural background in which melody is taught or in the cultural or personal aesthetics of the listener.

The line is, essentially, as a series of frequencies that take the place of one another, an unmoving object that one may perceive as moving, but, as a composer who works outside of tonality, the intention of the line is different. A melody, aestheticized, requires the intention of the composer to assert the illusion, an attempt to create a false experience of movement in the same manner he may do so in common practice tonality, but a line is an attempt at preventing the illusion, and attempt to not connection the pitches in any truly meaningful way. The melody becomes, in comparison, a perception of the relationships of pitches that can only be defined by a cultural or aesthetic view, one that generates a feeling, whether it be movement or not, that the listeners desire, whereas a line can possess anything as long as a line is a line, a series of pitches that have a direct connection to one another through their unity of being, that might be perceived to be related to one another, as a melody, but are not intentionally. The best way of expressing the aesthetic motion of a melody from the stasis of the line is noting that the line expresses a contour—a path—and a shade—how that path is transformed, and it does not express movement, but a series of alterations of *one thing*. Because it is difficult to compose without identifying a sense of motion between a series of clearly defined pitches and harmonies, it is better to conceptualize the denial of change by understanding what what one hears at one point in a musical experience, the line, is what is, and that thing will not change its essential form even though its qualities may change over time. In order to properly deny motion in a musical experience in which the illusion of motion is perceptually perceived, one must properly illustrate the *identity* of the musical experience as *one thing*.

Yet, as we keep finding in reducing down perceived experiences to their core substance, it becomes more difficult to deny what the perceptive faculties desire, especially these experiences that are aesthetic constructions, this idea of an Ur harmony that defines everything that follows it, and is drilled into the listener by their cultural, societal, or personal forms and expectations of music making, and this returns us to our notion of language and aesthetic change as poisoning the well of reality. Therefore, when Schoenberg emancipated dissonance and declared there is no difference between it and consonance, filling the implied empty space that the concept of dissonance as instability creates in tonal aesthetics, even though he is

correct, he appears incorrect, as the listener's perceptive faculties function according to a specific form of connections decided by their submission to a theoretical structural system and its aesthetic implications of movement, and they will, consciously or otherwise, make the connections necessary to resolve the yearning they experience. *It is*, but in the act of perceiving, *it cannot be*.

WITHOUT TIME

*For what kind of origin
for it will you look for? In what way and from what source
could it have drawn its increase? I shall not let thee say nor
think that it came from what is not; for it can neither be
thought nor uttered that what is not is. And, if it came from
nothing, what need could have made it arise later rather than
sooner? Therefore must it either be altogether or be not at
all. Nor will the force of truth suffer aught to arise besides
itself from that which in any way is. Wherefore, Justice does
not loose her fetters and let anything come into being or pass
away, but holds it fast.*

*"Is it or is it not?" Surely it is adjudged, as it needs must
be, that we are to set aside the one way as unthinkable and
nameless (for it is no true way), and that the other path is real
and true. How, then, can what is be going to be in the
future? Or how could it come into being? If it came into
being, it is not; nor is it if it is going to be in the future.*

(8.5-21)

The question of greatest consequence, and the one that we have been working up to, for better or for worse, is whether or not we can truly express that music can be without time. If it can be proven so that musical motion is nonexistent, and that might it be said that musical experience is without change, then no temporal delineations are necessarily meaningful, and no forms are really of value in the ordering of notes. It is perhaps even worse: that nothing other than our own perception can order notes; that they, outside of us, can only exist in an equal position temporally: the present.

This, of course, requires all of our previous arguments, the acoustic ungenerated and indivisible and the aesthetic unchanging and motionless, to be true, for these deal with the atomized instant of the individual frequency, of each harmonic moment being itself, without any movement from one moment to another, like that of the sho, one without any functional movement between harmonic instances. Beyond the smallest atomization, if the logic of the individual frequency is true, then we can feasibly extrapolate to larger instants, such as that of a theme or line, for it is more likely that the listener atomizes their musical experience to this level and views the juxtaposition of multiple instants as moments in time.

Motion can only truly be understood in two ways: the first being the actual quality of force being put upon an object and the second being the perceived series of instants that the viewer of a moving object transforms the object in motion into. This notion of instants, as found in Zeno's paradox, is important because it is a permutation of *what is* through the senses to create *what is not*. As we know that in musical experience there is no actual motion, for that would imply the pitch or harmony is unstable or incomplete when the opposite is true, and that there is no difference between the waveform at any point, because all expressions if it are simply it vibrating at varying rates of complexity, it is rather that our senses that create the experience of it moving to or from another pitch or harmony, and therefore we can express quite clearly that there cannot be *logical time*, because that would imply that there was a point in which a past point would be discernible, as a logical form of time requires point A to be different from point B so that one can advance the argument that point A is the past to point B's present, point B is the future to point A's present, and that point A and point B are both presents to their respective presents.

Yet, what we have is a waveform that possesses no distinctive, substantial change that could render it different at any point as to delineate a shift from one point to another and create a logical time series, thus, what we are left with are the qualities of the waveform,

according its cycles per second, which cause the perceiver to experience change, motion, and time despite the essential existence of the waveform remaining stable. This illusion leads to the creation of either *perceptual* (experienced) or *conceptual* (reasoned) time. The true difference between the two is that conceptual time requires first an experience of perceptual time as to make an argument for the concept of time itself, which is required for developing the concept of formal structure, whereas perceptual time is simply the illusion of the passing of time according to the senses and the transformative powers of the memory.

Of course, conceptual time is a shaky notion, because if it is a reasoned structure defined by perceptual time, then it can only conform to a single sort of perceptual time that is said to be experienced at a constant rate, as we can expect, as Gerard Grisey remarked, that it must be so that organisms that live lifespans of varying length will experience time at a different rate so that the time of insects is miniscule in comparison to the time of whales. And even then, in human experience perceptual time can be different from conceptual time, such as an individual going to sleep and then opening their eyes in what seems to be the next second to see that eight hours have passed, and one can go to the concert hall and experience a symphony feeling longer or shorter than it is if only because their engagement, or lack of it, alters their experience of the passing of time.

Thus, if motion is the perceived idea of subsequent moments, then perceptual time, and more importantly, musical time, is the culmination of these moments in our perception, our memory (8.12), and our reasoning (8.7-11); that is, the present, the past, and the future are all the results of our musical experience, but are not tantamount to the actual existence of musical time (8.19-21).

Just as in the contradiction of the body and the ghost, one thing appears to disappear, but *the idea* of that thing and its memory creates the knowledge of the past. One recognizes musical movement because they recognize the passing of one thing—a pitch, a motif, or a theme—and in comparing its memory to that to where they are now, they see the transition from past to present. It is the memory of *the idea* (the body), that becomes to one a ghost (for it *haunts* one's memory of *the idea*) that allows for them to know that it is the past, for only that which appears to have passed can be this ghost, this memory, that places them after it.

Yet, owing to these things being results of memory, that all of these things are interior, these are one's own attempts at interpreting one's experiences and the perception of that which is exterior; thus,

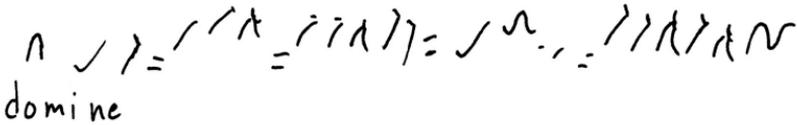
one can misinterpret something and then have false memories, and, consequently, skewed futures. Therefore, it is so that one's experience and retention of what occurs to create a sense of time is imprecise and insufficient. It also makes perceptual ordering of musical experience impossible in such a way that what one perceives must be rectified by a time that must be conceptualized to provide a framework to piece together one's experiences.

Of course, a conceptualized time is an attempt to create a sense of time exterior to our experiences of it, yet based upon our experiences of it, so it contains the error of our senses and memories, a trait which Parmenides would probably find no favor in. It is an exterior time that expresses our understanding of time, but something truly exterior could never be built upon knowledge that appears from interior experience. Instead, truly exterior time can only express itself in reality, outside of perception, and as such is timeless and eternally present, for it cannot exist otherwise, as it would require things coming into and passing out of being in order to delineate what is past, present, and future. This is generally what Parmenides' conception of time is understood as, and one can understand why this is deeply troubling, because we do have experiences, and they seem real, so how can they be wrong?

This definition of time as always interior, even if it positions itself as exterior, is important for a new understanding of conceptual time, and it is quite necessary because there is no language of musical time that can conceptualize this exterior form of time, one that is not defined by perceptive qualities. In general, western musical tradition has only expressed three major languages of musical time: *time as Verbum*, *time as pulse*, and *time as duration*. These are the three forms of time I wish to discuss because each, as conceptual time, atomizes the musical experience into points of past, present, and future according to distinctive traits, thus affecting how we approach the music in such a way that each alters what points are musically considered present, whether or not it is a series of pitches or one pitch.

The primary importance in the language of *time as Verbum* is the nature of the word I have chosen, for it only appears in the musical language of Christian chant, in which it is not simply words, but the Word, and great importance is placed upon it above all. Christian chant features a lack of pulse that cannot be understood through notation¹¹, but through the actual intonation of the words and their meaning, so that time is determined syllabically and rhetorically, not by any demarcations in neumatic notation, which seem to only reveal the position of the pitches in relation to one another.

And this unique sense of time is only properly expressed in the initial adiaستمatic neumes. The Solesmes neumes represent an attempt to convey this sense of time, and do it satisfactorily, but it should be noted that the more the visual representation of the pitch appears similar to contemporary noteheads, the more the eye's focus moves away from *Verbum* as time and moves toward a pulse or durational based time, which is experienced inherently in contemporary forms of notation. It might be said that the more notationally significant forms have been developed for the contemporary musician, who better understands this sort of visual notation because he requires a sense of duration or consistent pulse. Thus, this loss of *time as Verbum* is exacerbated in attempts to modernise neumes, because they shift the experience of time from the syllable to the note value, and the chant becomes some sort of art song, meticulously determined and ordered. It is not simply that note values are tied to a grid according to a pulse, but that the stress initially placed on the intonation and how that affects rhythmic rate is weakened in favor of a rhythmic rate better understood by a certain cultural or societal aesthetic.



Ex. 12 rendition of a St. Gall melisma, Cod. Sang. 374 p.3

Due to its unique manner of ordering time, chant comes the closest

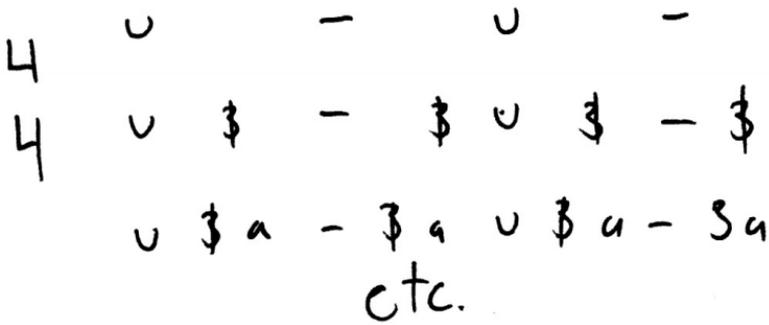
¹¹ Of note, there are those who disagree on the matter of rhythm in Gregorian chant, two groups of scholars that Willi Apel deems the “equalists,” those interested in free rhythm, and the “mensuralists,” those believe in pulse and determined duration, generally determined according to a few sources, St. Gall 359, St. Gall 339, Einsiedeln 121, Codex Hartker, and Guido d’Arezzo’s *Micrologus*, with occasional examples sometimes derived from other forms of Christian chant, such as Coptic or Byzantine—of note, they strangely make no inquiries with the practitioners of certain rites of Western musical liturgy, such as that of the Carthusians, which, being founded in the 11th century, and being a manner of strict observance not unlike the Cistercians, presumably follows a manner of practice unaltered for ten centuries. One cannot base an entire practice on a few manuscripts out of thousands, and, as much as I do appreciate Guido as a key to medieval practice, a single theorist cannot be the basis for anything other than a theory if there is no corroborative evidence from any other theorist. Therefore, concerning my thoughts on rhythm, I find it peculiar that a tradition that emphasized oral forms of testimony in the early church, and one whose formal services derive from aspects of synagogue services, such as Hebrew cantillation, a form of chant determined by syllabic rhythm, would, over a century of development, gradually deny a primarily oral manner of dissemination of the Word through the syllabic qualities of the Word itself.

to a sense of music as a series of durationless instants, one in which each syllable or word represents a unique point in time in which it is itself because the music is deliberately atomized to the syllable. The marvelous result of this atomization of musical time is that a melisma creates a point in which there is fundamentally no time at all, for there are no other syllables to determine the rhythmic timing of the notes, as seen in example 12; thus, each note floats within the purest form of the durationless instant possible in musical performance. As the Word is savored, *time as Verbum* creates a fundamentally present form of music, and the listener is not consciously interpreting what is coming and going, but what appears in the moment to accent not only the syllabic nature of the Word, but the symbolic value of it, and the result of this is that each syllable possesses an indeterminate length so that the present cannot be divided evenly as in other conceptions of musical time.

This eternal instant is fascinatingly contrasted in *time as pulse*, in which the pulse is independent of a rhetorical or durational device and essentially beats continually, even if there is nothing to count. The pulse is something that exists separate from the musical experience, and it is almost as if it is a grid that the musical experience is grafted on to. Thus, *time as pulse* creates a purely series based view of time, as it can be divided quite clearly into instants that have a past, present, and future relationship to one another.

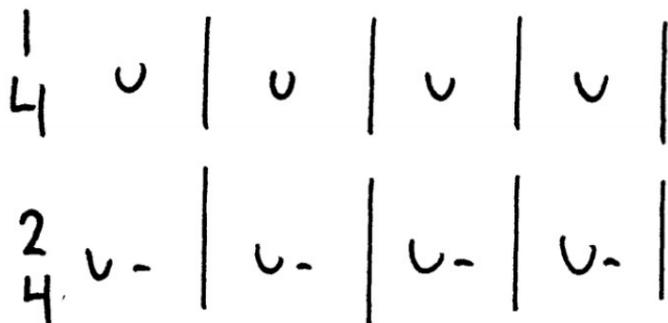
This is so through the ordering of pulse, in which a macrostructure that contains a series of pulses represents an instant, which places the total possible events in a conceptualized present moment is similar to chant's melisma. The pulse forms utilize certain stresses that delineate the present moment, such as the specific forms of stresses in a measure according to a time signature, thus, if there are three beats within a measure, a stress delineates the start of that three beat measure, and a stress will indicate the start of the following instance. One can define time as a series according to the progression of measures, and thus can properly delineate what was the past and what is the present.

Yet, a measure is not exactly like a melisma, that it is a single, timeless moment that cannot be divided, but it is instead an endlessly fracturable concept where one can continually split a point in time into smaller and smaller instants: one two three four; one & two & three & four &; one & a two & a three & a four & a; infinitesimally (example 13).



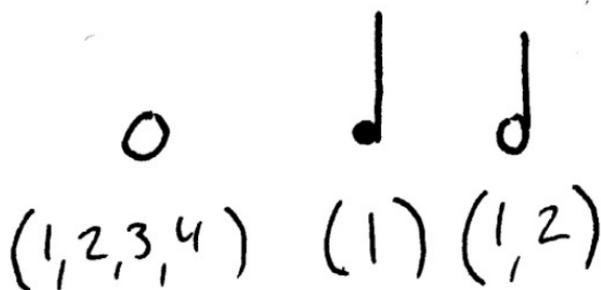
Ex. 13 Beat subdivisions

Consequently, the measure is not simply the present or a point in the past, but the very beats themselves exist as points of time. One knows one is on beat two based on a reasoned argument: beat one is stressed, and beat two is not; knowing that beat two is not stressed means that beat one must have already occurred, because beat two not being stressed means it cannot be beat one; thus, if it is true that beat two is not stressed, then we must have moved away from beat one to arrive at beat two, and beat one is the past, and beat two is the present. Beat one must have come into being in order for beat two to even be defined, because the current beat being beat two assumes that beat one is not the current beat, but a beat that has passed away. One must first conceptualize a time series to properly experience *time as pulse*, but one cannot initially experience *time as pulse* without this conceptualization of time because a natural pulse in a heartbeat possesses no stresses that can determine one to rightly occur before one another, or for one to unconsciously perceive it in a time series. If there is only beat one, or simply, beat, then one cannot order anything because the two beats are the same and possess the same spot. If both things are identical then one cannot express that they are different, and if they are not different then one cannot be placed above another, because that would require them to not be the same thing that would occupy the same place. A series of empty measures of $1/4$ would possess no differentiation from one another because they represent a series of identical pulses, whereas a series of $2/4$ measures would possess an innate differentiation due to the interplay between a stressed and unstressed beat would delineate a time scale in which one can see separate instances (example 14).



Ex. 14 Four empty measures of 1/4 vs four empty measures of 2/4

The concept of *time as pulse* has a complementary, but fundamentally different form in *time as duration*, in which the time length of a pitch determines the experience of time as opposed to the pulse. In comparison to the pulse of the measure determining time, the pulse allows for one to count the duration of a note, and time is determined by these series of durations. One can conceptualize time as whole note, quarter note, half note, and time would be determined by where one is within that series of events (example 15). If I am at the quarter note, then I know that the whole note has passed, because I could not be at the quarter note present if it did not pass, and I can also know that the half note is coming next after the quarter note passes. It is roughly similar to *time as Verbum*, but because there is a defined duration that is counted, it cannot exist as a purely durationless instant. A whole note, unlike the length of a melismatic notation, which possesses no pulse and no determined series of counts until it passes, cannot last forever, as the count will eventually pass, but the rate at which the count passes will cause the experience of the duration to vary.



Ex. 15 Durational schema of various note types

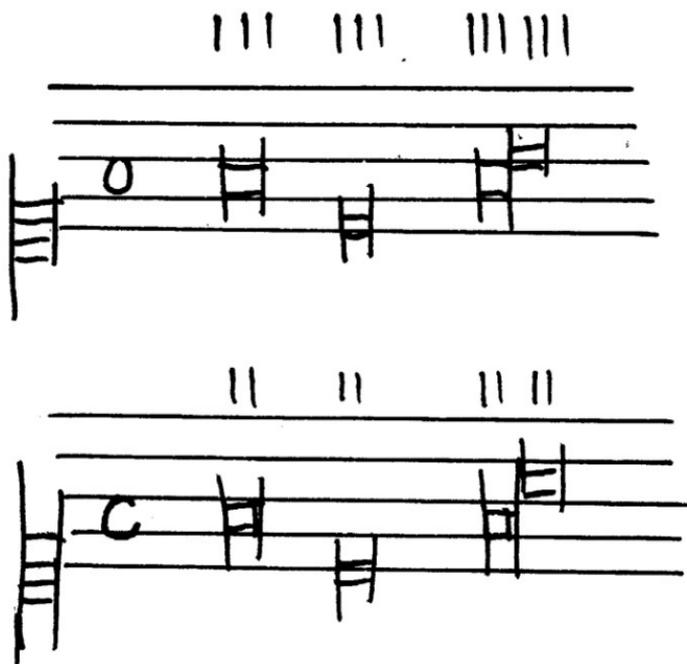
There is a similarity to the differentiation of time that Stockhausen was seeking in his essay, “. . . . How Time Passes”, in *time-quantia* (measured) and *field-time* (experienced), and time as pulse and time as duration:

It is rather that rationally guided measurement of time - counting - is reinforced by a spontaneously reacting utterance of time - agitation of time. Whereas up to now the action of playing (and of hearing) had to orientate itself to time-relationships that were measured in durations, there are now, to some extent, cases in which time-proportions arise only through actions. In other words: up till now, one could see from the score the time-relationships composed in a piece of music, quite independently of its realisation in sound, and the 'rightness' of a realisation in sound could be checked against the time-notation in the score; but in a field-composition, the parts of the score in which actions are notated give no information at all about the measurement of time-proportions - the latter come into existence only at the moment when they are released in sound, when they are played. In this case, the 'rightness' of a realisation is checked against itself; tested, that is, in order to find out whether the action-times in the moment of playing stand in an organic relationship to the sound-times to be produced.

(Stockhausen 1959, 37)

However, I would not consider the two exactly the same, because the manner in which we define the idea of *duration* is substantially different. Stockhausen understands duration as intrinsically linked to counting pulse, because a pitch duration would be a whole note sounding over four beats, and one could distill these two further into a single concept of time, but that would be ignoring the nuanced differences between the two senses of pulse, which I conceptualize as different than how Stockhausen does. What I mean to say is that the *object of time* in these two are different enough to affect how they are experienced. Remember the key difference between the two is that in *time as pulse*, the meter, its pulse, and its subdivisions are defined prior to any notes being defined; one thinks immediately in 4/4 not of the duration of a whole note as four beats, but of the four beats themselves. This is contrasted in *time as duration* in which the duration of a note is defined prior to the existence of the pulse: a whole note is a certain time scale, and then it is counted as four beats.

I would argue that *time as duration* is intrinsic to medieval mensuration as opposed to a standard pulse interpretation, because, despite how one might read mensuration as the number of beats, as in a time signature, what is being changed, by prolation or diminution, is the duration of the written note, not the number of beats of the section that the written note exists within, if that can be understood. Though the mensuration sign is the first symbol written on a staff, its pulse not the first thing conceptualized; rather, the order is understood like this: the notes are seen, the mensuration sign is



Ex. 16 Durational schema of the first four notes of the Kyrie of Ockeghem's *Missa Prolationem* according to mensuration (Chigi Codex, 106v)

checked, the durational adjustments are made, and then the pulse is given. Thus, in a work like Ockeghem's *Missa Prolationem*, the singers receive a single line that appears the same, but they will check the mensuration sign prior to the pulse being given, and understand their time scales accordingly (example 16). Thus, their *object of time* is the durational schema of the *breve*, and the pulse allows for them to check the duration in performance.

Therefore, as opposed to pulse based music, such as that of Debussy and Stravinsky, in which the shift in meter emphasizes pulse, not duration, a duration based music makes use of pulse, but the pulse is not emphasized and exists merely to allow for the performer to check for duration. Much is made of the supposed equivalent relationships between certain mensural signs and modern time signatures, but the inherent elements of time signatures as pulse based, of certain stresses and separations according to bar lines as demarcations of a time series, do not exist; that is, in this sort of durational music the time series is not determined by how one counts the pulse, but by how the durations are transformed by mensuration. Moreover, Stockhausen makes a fruitful (though clearly meant to dismissive) reference to Cage's development of a completely

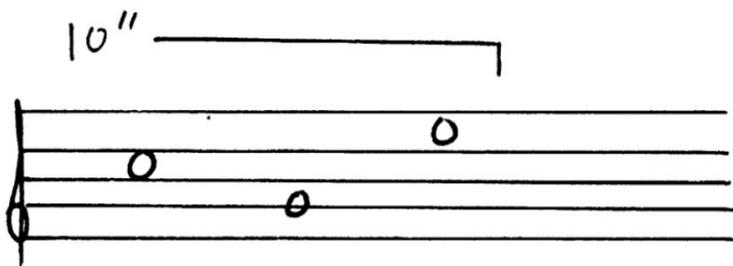
ELEATIC CONCEPTIONS OF MUSICAL EXPERIENCE

durational notation (example 17) in which the duration is tied to a visual representation of a line so that the results are determined by how the performer understands the spatial relationships between the available pitches.



Ex. 17 Durational notation

Developments of this also included music in which “clock time” (example 18) is used for pages, systems, measures, or groups of pitches as opposed to a pulse based time, and with the development of these forms of durational delineation of time, durational relationships become more important in defining musical time than the steady beat of a pulse.



Ex. 18 “Clock time” notation

Of note, the development of Stockhausen and Cage’s durational time relationships allows for a minor form of conceptualized time, *time as space*, which could be considered similar to *time as duration*, but the focus is not on the duration of the note value, but on the duration of the space between two series of note values. Time would be ordered like blocks of melisma with the space between them determining the span of time. This, of course, is interesting because, though it can be reasoned, in action it is not so much conceptual as it is highly perceptual. *Time as space* does not require an existing formal argument to create the appearance of a time series, but only requires the listener to formulate a sense of time through the perceived spatial difference between two sections of music. An echo, like a *dux* and



Ex. 19 The difference in spatial positioning of a *dux* and *comes*

comes (example 19), creates a sense of time through the perceived distance between the two. One places a present musical experience by the moment that occurs, and the echo, as close or as far as it appears, creates a new moment that defines the line between past and present. If the space between the *dux* and *comes* is large so that there is a segment of silence between the two, then the *dux* and *comes* in their complete forms are the linear time series of past and present; however, if only a note of the *dux* occurs before the *comes* appears, then that single note is the past and the combined *dux* and *comes* becomes the present moment.

The notion of *time as space* as perceptual time creates a sense of overlapping time scales, in which certain time series move at different rates than others. We can still conceptualize the musical experience as *time as pulse*, but when we listen, our perceptual experience of a close or far canon can exist on a different plane of time so that what is conceptually past could perceptually be the present, and vice-versa.

Thus, *time as space* also allows for the experience of formal relationships in music. The contrasting sections of a structure, such as a ternary ABA, allow for the listener to experience the same manner of time as the *dux* and *comes* at a larger time scale. Musical macrostructures are nothing more than various layers of conceptual and perceptual time, and each event to the listener can be understood as an amalgamation of several time series. It was, of course, the development of these ideas formally by Stockhausen and Tenney in the 20th century that provided the most important breakthrough in the understanding of music through one's *perception* as opposed to formalized *conception*. For a great deal of time, music was not necessarily perceived, as touched on at the end of the section of motion concerning common practice harmony, because the assumption of tonal form was that it was *conceived* and provided ready-made. This, too, was the problem of early serial music, such as Messiaen's "Mode de valeurs et d'intensités" from *Quatre Études de*

rythme (1949-50), Cage's *Music of Changes* (1951), and Nilsson's *Quantitäten* (1958), among others, in which the goal is entirely conceptual and the listener is given something that requires no work to parse, because the intended result was the *conception* of serialization, not the manner in which the listener *perceives* serialization. It is Tenney that brings the greatest breath of fresh air to this in focusing purely on the perceptive faculties in musical experience, and his work in applying Gestalt psychology in *Meta|Hodos* to the study of music allowed for him to differentiate form as *temporal proximity* (*space as time*):

temporal proximity may be manifested in either (or both) of two ways—as contiguity or as simultaneity. The essential principle is the same in either case. Applied to auditory or musical perception, the factor of proximity might be formulated as follows: in a collection of sound-elements, those which are simultaneous or contiguous will tend to form clangs, while relatively greater separation in time will produce segregations—other factors being equal.

(Tenney 1988, 29)

The experience of music formally is a result of a perceptual experience, even if the formal outline is essentially conceptual. A sonata is a conceptual device, but within that conceptual device the listener also possess the ability to perceive and parse experiences in such a manner that they can also infer time as a relationship between voices, notes and rests, and harmonic transformations, and then time becomes a result of an experience of various spatial elements.

However, it should be expressed a deep discussion on form as a subject is irrelevant, as form is not simply a conceptual or perceptual constant, but is, in academic musical theory, largely an *aesthetic* aspect of the musical experience, which is a perceptive corruption of our line of logic, and thus the experiences of things happening in a sequence and appearing to be related or distinct from one another is an illusion of connecting patterns. Because the listener appreciates pattern based experience, as it is familiar and one can relate their memories of past experiences to the present to create a satisfying path, as in the trail of a harmonic progression, formal organization is a highly sought trait in musical structure. It is because the aesthetic appreciation of certain formal organizations is largely cultural—after all, contemporary musical composition does not place any value on the medieval *formes fixes* and medieval musical composition would not express any interest in the form of the twelve-bar shuffle—that it is useless to discuss them as anything important at all. I believe it is rather clear that music does not require conceptualized form for intelligibility or to possess inherent value, as the listener will

ultimately make their own associations regardless of the composer's plans.

These complicated conceptions of time realize what Parmenides deems impossible: the individual's belief that one can continually serialize time as to create varying accounts of what is happening according to what had come and is now gone. When one looks back at the example of Zeno's arrow, one can understand Aristotle's qualms about Zeno's argument: motion cannot be strictly divided because time cannot be serialized, for that is not how one *perceives* time to occur. If one did not think of the time series and conceptualize a series of memories of *the idea* frame by frame, dividing time into moments, then one would not have an internal conception of time; yet, if one could not conceptualize a time series then one could not properly express the argument of motion or change place, because that would require a past point for the object to be in the prove that the object was not always in its present point. If time cannot be placed into a series of instants that are reasoned internally and then expressed externally, then it would have to appear that time is as if eternal present, with only ghastly memories haunting one's mind.

Thus, when we return to Parmenides initial argument, that something cannot come into being and then pass away, so that time assumes generation, how can one argue against musical time without simply expressing the intellectually lazy argument that a conceptualized experience is not a true experience? It has been clear in each argument that Parmenides logic is so interwoven according to this rounded sphere that the proof of one proves the others and the denial of one denies the others; it either *is*, or it *is not*.

Yet, how can one know? If a waveform is unchanging, and it is just that the quality of the speed at which the same waveform vibrates that creates a sense of it "changing," can one express that? If it does not move, knowing these "movements" are the same thing that is immovable, it cannot possess a past form or a future form to be because the waveform reveals no change of place and it reveals no change of form. But then what of the quality? It is true that the cycles per second at one point are slower and at another point faster, so then it must mean that one point must be the past, one point the present, and one possible point being the future. But then to prove this we would have to prove the cycles per second to be the *identity* of the waveform, like how one must prove that the *identity* of the arrow is one in motion to prove that it is in motion. Yet, this would have to prove that the arrow must always be in perpetual motion, without the need of an outside actor to put it into motion, and this of course

means that it cannot be taken out of motion, for that would deny its *essential identity* and change it. One would have to express that each possible cycle per second is an individual waveform, but then one must argue for the divisibility of the waveform, that it is many, as otherwise we would have to physically change the *essential identity* of the waveform each time the cycles per second changed. However, one would have to explain why a single string, which appears to be *one thing*, could possess many *different identities*, and explain how it could express these *identities* if it would require *different identities* at different times, which would require one to pass out of being to put another into being, which would mean that an *identity* of that string must not exist at a point in time; yet, if it must not exist at any time, it cannot exist at any time, because a thing that does not exist is *no thing*, and if a thing *cannot be*, then it *cannot exist*, because it cannot be thought of or expressed.

Thus, Parmenides' argument, concerning musical experience, requires it to be one thing: ungenerated and indivisible; therefore, it must be without change, without motion, and without time. One either accepts *what is* or chooses to believe in *what is not*.

ἀποκατάστασις

So then, what is left? If the actual value of this work was to make a reductive argument, then we would be complete, but the end goal here is to find a point, *via negativa*, to allow for *apokatástasis*, the restoration of the true, primordial state; *sicut est nunc, et semper*.

Of course, one could question me here, for, is this truly a way out? After all, I am only conceiving something myself, something that, unless others also accept it, means *nothing*. Obviously it is only a way out if one deems it as so. One could easily deem tonality as a way out, as they could deem any other manner of conceiving musical experience, and they could disagree with or incorrectly perceive what I am conceptualizing; yet, anything can be misunderstood or refuted, and that is the great dilemma of musical organization and musical language. One cannot help the fact that once someone *perceives* something, they will instinctively perceive it in such a way that *it is not*. Parmenides perhaps understood this quite clearly when he drafted his poem, and I believe his goal was not to convince us that we should somehow abandon our perceptive facilities, but to express the reality of man's inability to know truth, and man must face this and accept that what he believes he knows is true cannot necessarily be true. It is not that human experience is worthless and without any value—to even utter that is to place a value on it based upon our perception of our perception—but that truth shall always exist exterior to human experience. It is as Paul expressed: *oculus non vidit, nec auris audivit, quae preparavit Deus his*.

There is, in this, an existential problem that might cause a great deal of anxiety; for, if it were to be that an everyman were to realize that their entire experience of life is invalid, that their presumed truth is not so, but is a figment of their imagination, or even worse, an illusion or dream they blissfully partake in, then it perhaps might be better to exist within a false reality, to live within Plato's Cave, than it is to venture outside and face the truth, whatever it may be; for, the truth is painful, not because it is repulsive, but because it is indifferent, because the study of truth is the study of everything that is not what we wish truth to be; for, as in the result of the knowledge of God, it is not what we wish to attribute to it, but what is left when we reduce it down to its purest essence; and, when we reduce what we perceive down to its purest essence, to find where Parmenides' goddess begins, we find the object; indeed, it is when when we find that the Palazzo is not what we perceive it to be, or wish it to be, as neither fascist nor anti-fascist rhetoric, but that is is an object, uncharged by political rhetoric exterior to itself, that we find truth. Consequently, if I seek God, I cannot add on ideas, I can only find what God expresses himself as. When he speaks to Moses as the

burning bush, what does he reveal? That *he is who is*, or that *he will be who may be* (Exodus 3:14)? When he speaks to us through Christ, what does he reveal? That he is *love* (John 1:18)? He, as the object, promises himself to us, and it is through Christ that he reveals his existence, but it is not through our perception of God that determines what God is, but through how God expresses himself.

Just as in God, or as in the Palazzo, one must, in order to express truth, first conceptualize that which is true, that which is exterior, by denying everything but the essence of the *object itself*, what *the object expresses*; then, they must exercise the intention of expressing the object, without any aesthetic transformations, as it is. The success of the result is not in whether or not the perceiver properly understands the object, because they must enter the experience with the intention of only perceiving what the object itself expresses. The success of the result is in the execution of the experience with that intention remaining intact, as to provide the perceiver the chance to perceive the object itself, even if they do not.

To intentionally do this in terms of musical experience requires one to deny two things that I believe are harmful to the object, the waveform: the division of it via tuning, and the manner in which one conveys it in notation, and it is notation that is the most egregious offender, as it itself is an enabler of tuning and intonational division. Thus, those three non-acoustic tangents that appeared through finding *what is via negativa*—language as a means for structural systems that do not exist, aesthetics and artistic rhetoric as a means for changing an object without ever changing the essence of the object, and the necessity of Zeno's paradoxes as an argument against seeking solutions outside the object itself when the solution is the *object itself*—become a key to the final point of this entire argument against *what is not*, for it seems that I must attack modern notation, as I believe that notation as it is does not represent *what is*, but merely reinforces what one is told, *what is not*, that it cannot represent anything.

Understand it from this perspective: when one sees an engraved score, one does not question what the tuning or intonation of the score is, because in one's training in reading music there is a psychological development of how one, when viewing the notehead, makes assumed connections. One does not think about the question of A's intonation, one plays the equal tempered A. When I discussed this problem of the tuner and the pianist placing a different value on the note A, what I wanted to question was our lack of intention to understand *what is* by simply playing the notation on the page, as opposed to contemplating the music that the page exists to

communicate. People express they have a connection to music, but they do not express the knowledge of what that truly means, for, their connection is to the key of A, or is to a notehead the represents that key A, not to the frequency that might express A. A as a frequency, as the waveform, does not exist to them, it is a position on which they place their fingers. When a violinist reads A on the score, their first thought, is, again, not the intonation or frequency of the waveform that expresses any possible form of A that might be equivalent to the rough idea of A on the page, but what position will be the easiest to play that A. The actual expression of the frequency, the place in which they finally place their finger to sound A, is memorized, and they do not think about what it is, as they were simply taught that A is there.

A, as notation, is a point that represents a problem with the accumulation of factual, not experiential, knowledge in modern society: that is, the more one knows through rote learning, the less one knows of *what is*. In the past, music was treated, in the Quadrivium, as a portion of the accumulation of knowledge through which one might know truth, that the study of it, alongside arithmetic, geometry, astronomy, and the Trivium, would allow for the student to form a better understanding of the natural world; the study of music was not an aesthetic pursuit, but a one focused on the study of what is, one that would eventually be displaced by scientific study. To avoid telling the history of the scientific study of music, the end point of the study of science is that one merely memorizes formulas that pertain to waveforms, that they do not actually undertake the in depth study of how the string vibrates on the monochord as those in the past did. This is certainly the easier path, for it allows one to express ideas easily applicable to a society in which the purpose of science is for a material end, a result that can be quantified; yet, in natural philosophy, the end result is not quantifiable, but is interior, a form of personal knowledge, and the end result of natural philosophy is truth, not how that truth can be used for some sort of material purpose. In some sense, and Harry Partch expresses this much more lucidly than I could in *Genesis of a Music*, the development of equal temperament appears at a time in which scientific development is focused on the standardization of experience through empirical means; thus, at some point in time, as we leave the generation of Froberger and Couperin, in which the intonational experiences are localized to the manner in which one tunes their instruments, there is a notion that one can universalize the experience, not through structure, but through forcing a series of constants on intonation through reinterpreting how we interpret the

notation itself; that is, it is not that a line is considered universal because its contour can be expressed more or less intact, despite the tuning, but that a music is universal because its tuning is a constant; thus, when one sees it, one assumes that it is performed in the same manner as music from any other country. Therefore, an equal tempered society develops out of an idea that a truth can be universal simply because it can be enforced; that one can, through a perversion of empirical science, with results according to one's ears alone, determine a certain set of frequencies superior, if only because, along all harmonic situations in tonality that one can equate a certain series of frequencies with one another, if only because they seem similar, even if that results in the denial of those that do not sound alike; yet, this leads to the question that, if this develops the primary problem that, when we press the key A, we no longer have any connection to whatever A may be, but that we only have a relationship to what one has told us A is, can we really express that we know what A is? If what we do is only drilled into us by rote, then do we truly know anything about musical experience; no, about sound itself? For, if it is so that a scientifically devised, equal tempered society leads to direct results—a society in which one can quantify the number of practices that go through smoothly, and the resulting number of possible performances, through the ability to prescribe a set series of pitches as the only ones necessary—then this leads to the question of whether equal temperament, and its notation, are destroying the possibilities of expressing *what is* in favor of a materialistic expression of the number of pieces one can perform in a season. After all, modern society, with its pressures of profit and cultural relevance, has altered how we experience music: orchestras are expected to follow their budgetary restraints, but also perform night after night, and composers and musicians are expected to act within clearly defined parameters of what is possible so that the orchestras might perform any music with the few rehearsals they are allowed; so much so that if one chooses to act outside of the materialistic, results based paradigm that has been exacerbated by the rise of the popular music industry, such as Harry Partch, Lou Harrison, or John Cage, then they are to be relegated to a footnote in musical life, outcasts unfit for the musical aesthetics of the modern day aesthete, those who are strangers in ordinary musical life, if only because they chose a musical experience that was outside of the artifice of a contemporary musical society that chooses to exist upon false abstractions of musical experience. If one denies the attributes found in modern day music making, whether that be popular music or neo-romanticism, then one is not an innovator, but somehow unimportant, or even an

obstacle to musical progress, as Schoenberg has been vilified in the post-serial thaw in music, and those individuals who return to these ancient virtues of self-discovery are eschewed, and they are deemed either amateurs or a niche cranks, better left forgotten to time.

Of course, this leads us to our root problem: a series of ciphers developed, and memorized, to support the equal tempered, materialistic, quantifiable results driven society that we have perfected in modern notation. If the role of notation is, like language, communication of the object, and if the object is something that cannot be divided so that a certain choice of intonation is superior to another, lest it no longer represent *what is*, then notation as it is, as these noteheads that communicate equal temperament—and not merely in what they do, but what they fail to do, for they do not dissuade us from thinking A is a specific thing as opposed to A merely being whatever A could be—fails in its inability to properly communicate. In the line of logic I am trying to express, we end up moving toward the notion that *the thing that is only expresses itself* and does not communicate anything other than *its being*. 415Hz can only express itself, it does not express this pitch we deem A. We notate A, and to us A can properly express that experience, but to another the musical experience of A can be incompatible. A might as well be 392Hz somewhere in the world. To some this is fine, but the problem intrinsic to notation is that, if it cannot properly communicate anything, then it cannot communicate at all; for, communication occurs with the development of a language that can express *what is*, but it is up to us to create a framework in which we can properly communicate it. There are two ways of solving this problem of A in modern notation. The first is to simply define A universally, thus we decide $A = 415\text{Hz}$, and each time the notation for A appears one assumes it is always $A = 415\text{Hz}$; however, by doing this we must be willing to accept that our musical experience has become stratified according to an unnatural hierarchy in which we have made certain frequencies a few cents apart into *the other* when they naturally are equivalent. Thus, we find the second way: defining for each notated pitch the cent deviation or hertz value in comparison to the universally accepted one, which is what the designers of microtonal notational ciphers attempt to do. Yet, though microtonality exists as an argument against a false division of musical experience into equal temperament, it too is an arbitrary decision. One might think they are solving the problem of hierarchies by opening the gates, but the hierarchies always exist as long as a cipher determines something that is not. What use is Sagittal if it performs the same transgression of drilling into the mind of the performer that the cipher is a thing and

only that thing, as if it has some sort of organic correlation to the the thing it represents? Sagittal still tells us that a tone is defined according to a tuning, a falsified division of the waveform along a preconceived notion that a pitch is best as one thing.

As one might understand, my issue with these “solutions” to communicating a musical experience is that they are fundamentally unable to communicate anything without a definite object, but the more they are defined and refined to attempt to possess some sort of artificial definite object, the less they have to do with the root *what is*, and an inability to communicate what is means that it can never truly express anything of substance. Consequently, my final realization of language is that Cage’s koan is literal:

I have nothing to say and I am saying it

This statement becomes one that expresses that what one is saying has no actual meaning. One is expressing a series of words that are put into being to describe *a thing that is*, but there is *no thing* to express because there is *nothing* at the root source of the statement. Cage’s statement is a non-statement because the statement is about nothing. He utters words, but the words he says have no corollary, because there was *no thing* prior to the statement that the statement was trying to express. The statement then becomes an argument without foundational truth, and becomes *nothing*. I will put A on the score, but the A in the score is *no thing*. Truly I communicated A, but I did not communicate that substance of A; therefore, *nothing*.

Words, statements, definitions, notation; these are all *nothing*. If one began to slowly move from a belief in fabricated language, they would begin to see that more and more notation and musical ideas have less and less of an actual meaning, because they begin to express something that is nothing, that one believes can express something that appears to exist as true, but the truth of which has no basis over any other conceptualized, not essential, truth. The interpretation of a score without any true solid foundational truth is like the attempt at interpretation a notation that acts as tablature for scordatura, but the actual scordatura is missing or not provided. You have directions that define the existence of an object, but if the nature of the object is unknown, then you cannot express anything.

If the purpose of notation is the communication of the composer’s musical experience, then its inability to communicate properly *what is* stands as an insurmountable obstacle. If the purpose of notation is rhetorical, an argument interpret for the sake of interpreting the structure of an argument, then it cannot express

anything. The purpose of notation must be reexamined. Therefore, I have, in response to this failure, chosen to redefine the purpose of notation as:

a path to musical experience

It can no longer be a composer's personal experience, or even a specific experience in general, because that experience is unique in such a way that it cannot be expressed without being different enough that it is no longer that same musical experience the second time, or the third time, or the fourth time. In the ink lies not what had happened, but a means to what might happen. *What is*, as Celibidache would insist, is discovered only at the moment that it happens, each time it happens. Notation should not be a record of an event, as if it must be like a reference recording, rather, it must be a tool that can allow others to have a musical experience, even if it is not the same, because the point of a musical experience is the musical experience, whatever that may be, as if performing Froberger *avec discretion* or seeking the right shape in Couperin's unmeasured preludes.

Due to this distinction of it being impossible to define in exactitude, it is perhaps so that modern notation is insufficient. It exists according to a set series of linguistic rules that determine that it means something that does not exist, and to develop it any further would be to continually define more things that do not exist, when what is in no need of being defined, and thus lead us away from *what is* toward *no thing*. If one asks for a solution, I would reply that simplification, not further definition, is required; instead, a return to square one, so that the language is so simplified it exists to easily convey *what is*.

Yet, of course, this also means that the composer, in order to properly express *what is*, must work within their own form of notation, one that they believe effectively expresses that which is real, and one that can allow for a musical language that is deferential to *what is*; one that expresses the thing itself, not our belief in what the thing is. However, this alternative form of notation cannot be understood as if it were the 1960s and 70s, when notation was uprooted for revolutionary, political reasons; for, the ultimate goal is to not buck the system and replace it, but allow for the interpreters to view the object itself, not their perception or preconceived notions of what it is. Graphic scores often miss the purpose of the alternative notation because they make the notation about the complexity of form of the graphics, not of the resulting sound; that is, the

performer tries to perform music as if it is a zig-zagging line, but they are not performing the music as if it is an expression of real frequencies, as they are merely guessing at what it can be. The result is totally unknown in a graphic score, and that is incorrect because that means that there is nothing to communicate, to express. If one is Cage, and wants to express nothing, then these scores are wonderful, for they destroy the notion of a score as a method of communicating an experience and place the improvisatory state as the experience; yet, in the context of what I wish to express, this is the wrong way, for it, in its indeterminacy, cannot allow the object to express itself; instead, the interpreter is expressing their *idea* of the object, but not their *knowledge* of the object. If one does not understand the frequencies that they make because they are too focused on something such as a graphic curve, then they too ignore *what is* in the same way one who reads a properly notated score also fails to understand *what is*.

The purpose of notation can be understood as a means for allowing the interpreter to know and understand the sound of *what is*; thus, that language must be simple enough to be understood at the same level as modern notation, as if sight read; however, unlike modern notation, it must represent abstract points, things that, like language, do not have any real definite meaning because they only can represent something. Instead of viewing the notation as a real thing, assuming that A honestly exists, and is not simply a way of notating 441hz, the notation must mean that it could be something at a point higher or lower than another point it is placed in reference to; it must act as a proper replacement for noteheads, because the sight of noteheads draws the interpreter to their memory of modern notation, but it cannot be anything beyond that sort of notation.

Furthermore, its indeterminate nature must be supported by the fact that it, to most interpreters, is foreign enough that they have no background knowledge of what it actually means, for, in the contemporary world, one congenitally attached to modern notation, it does not possess the collective, societal, or cultural memory that noteheads in modern notation possess, and as such it can be both an equivalent—in that it may be any frequency that is within the audible discernment of a pitch, A—and a relative—in that it can be any frequency one chooses the pitch, A, to be—form of cipher, and it is not a binding definition so that A in one moment may be 445, yet at another time might be 432. If one denies definite intonation, then one cannot divide the object into *what is but must not be*. A could be anything, as long as one understands that the notation they read is simply a guide to expressing whatever A could be and that they are not expressing the notation, but what the notation is leading one to,

and one must recognize that the difference between whatever A and B really are in notation is only that the later possesses the quality of a higher intensity than the former.

What I mean to say is that one can make an argument for a conceptualized musical language that is a proper corollary of the Eleatic conception of musical experience that I have defined, as much of the work concerning the musical experience exterior to our sense perception has already been accomplished; that, ignoring how one perceives music, as even Schoenberg eventually accepted that some listeners would never be able to overcome their habitual expectations, one can conceive it so that it is not built upon perception, as tonality, or even modality, is, but upon *what is*.

My reasoning for an experience of music that is unchanging is built upon my own personal experiences developing the playing of Partch's *one-finger technique* on the viola, in which the nuances of portamento have changed how I visualize and aurally understand musical experience. As expressed prior, on a keyboard the vision and hearing are divided, and each note appears as different from any other, thus someone who has musical experiences on an instrument that is divided will come to understand the frequencies as divided, and in instrumental practice that is determined by this even stopping and sounding of pitches as if one is pressing a key. Even if one is playing an unfretted string, one misses the truth that lies before them; yet, the application of portamento in the manner that Partch learned from Indian music, moving from one position to another *without lifting up the finger and creating space between the two positions* allows for one to realize that the playing of notes signifies not a change in pitch, but a change in rate. Though the pitch we recognize as A becomes the pitch we recognize as B, the truth is that the string never changes, it is always that image of the perfect waveform, undivided.

If I were to attempt to define this, it would be a feverish, dreamlike vision of *one sound with different qualities*, and if I were to explain it to one who could not conceptualize it in the manner that I can, I would express it like a beautiful, vigorous vibrato, for, in tonality you would never conceive of the notion that you are changing the note doing so, despite it being wide enough to transform it into a microtone, because you, having intentionally played that note, recognize that you are simply changing the quality of the note, not what you know it to be. To me it is the same here: all is *one sound*, a single waveform, and I am expressing its many vibrations without ever making myself believe that I am expressing anything else but *what it is*. If I were to attempt to put it into words, it would be that:

*It is the same, and it rests in the self-same place, abiding in itself.
And thus it remaineth constant in its place*

(8.29-30)

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