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CHAPTER ONE

Manifesto

In a galaxy far, far away...

— *Star Wars*

Music theory has seldom been modest. A manifesto entitled “Toward an Intergalactic Music Theory of Everything” should be no surprise, except for the modesty of the word “toward.” Such caution is unbecoming of the genre. After all, music theory, in all its speculative glory, was the first “string theory” of the universe (Figure 1.1). Admittedly, compared with the quantum vibrations of current string theory, it was somewhat reductive, consisting of just one string; but it was a very long one that tuned the motion of the planets and ordered the entire chain of being along its harmonic series. Music theory *ratio*-nized the cosmos. It was a theory of everything. The universe vibrated with knowledge, and there was one string to rule them all.

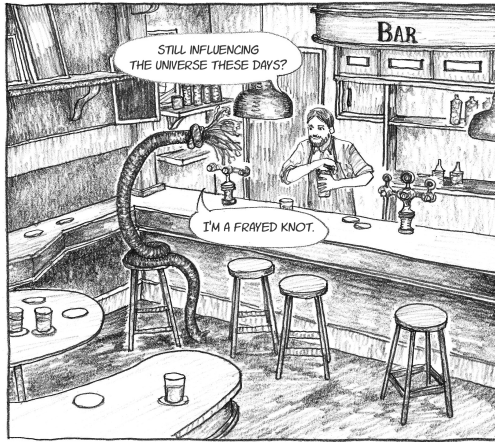
Pythagoras would have called this his “big twang theory,” were it not for the fact that such music didn’t have a beginning. It was eternal, a resounding ring of timeless integers that intimated a metaphysical reality. Music was being. This ontological string pulled the world together and kept it in proportion for some two thousand years. Even when its cosmic order waned as the light of reason dawned upon the eighteenth century, music theory continued its immodest claims, stirring up quarrels among the intelligentsia concerning the identity of body and soul, matter and spirit, the world and the self. Indeed,

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music theory was seldom just about music. So much else seemed to hang on this one string.



Times have changed. Although music theory today is still entangled in the frayed fibers of its ancient string, it has become increasingly irrelevant in explaining anything other than itself.



A string walks into a bar

It has evolved into kind of a truism that borders on tautology: music theory is for music theorists. It has fallen into an academic narcissism that would be quite beautiful, were it not so boring for everyone else peering into the discipline. Of course, this assumes in the first place that it is possible for those on the outside to penetrate the density of its discourse in order to experience the beauty of its boredom. It is dull and forbiddingly opaque, and most scholars leave music theory alone to talk to itself.

So why bother with music theory? Because its cosmic potential is too big to fail. For music theorists, this manifesto will clearly be a sharp, short critique intended as much to be a goad as it is a call

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to action. For others, this internal critique may seem irrelevant. Why not skip the chapter and leave music theorists to circle within their solipsistic enclosures? Because such an omission would be a failure — a failure not just of nerve, but of method. This chapter is vital in revealing that we *all* need to be music theorists and that there is nothing to fear from the music-theoretical barriers erected to exclude a wider participation.

So what are these barriers?

To summarize the issue, there are two questions facing music theory that those on the inside often fail to see, but that are blindingly obvious when viewed from the outside:

1. Why is music theory so boring?
2. Why is music theory incomprehensible?

The two questions are obviously related, complementing each other as partial answers, but there is more to this than just boredom induced by incomprehension. Let's address the two questions.

1. In answer to the first question — Why is music theory so boring? — we need to be clear that this has nothing to do with the quality of current scholarship. It has never been better. If anything, it is too interesting to suffer from *ennui*.¹ No, this boredom is of another order. It has to do with vision. Or rather, the total lack of vision. It is as if music theory has erected thick double-dotted bar lines on all sides to contain itself in a perpetual state of internal motion (Figure 1.2).

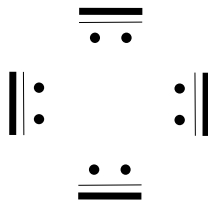
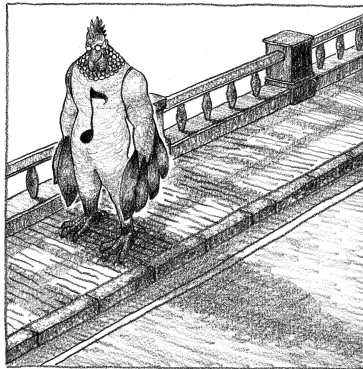


Figure 1.2. Music theory's cordon sanitaire

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This isolationism probably stems from its emulation of “absolute music,” the idea that music is essentially a self-referential system about only itself, music that, as Richard Taruskin explains, requires the cordon sanitaire of theory to keep music’s essence pure and its form autonomous.² But this obsession with hygiene results in a theory that is highly allergic to everything. What was formerly a theory of everything now sneezes at the cosmos it once explained to keep its knowledge to itself. As a consequence, music theory is boring because it is irrelevant. However interesting it might be internally, it just has nothing to say beyond its little plastic bubble, its cordon sanitaire. What used to be the most gregarious and speculative of disciplines, with a reputation for nosing around the cosmos as a cross-disciplinary space invader, is now reduced to a lonely, solipsistic existence. The fact that some intrepid music theorists may burst out of the bubble, venturing beyond their disciplinary borders to enliven their own scholarship, is beside the point. The question is: Who adopts music theory to enrich their discipline? The answer is: no one. Music theory has written itself out of any participation in epistemology. It is structurally boring.



Q: Why did the music theorist cross the road?

A: He didn't.

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2. As for the second question — Why is music theory incomprehensible? — the answer cannot be attributed to the incomprehensibility of scholarly discourse, which is the native tongue of academia. Academics understand each other's incomprehensibility perfectly. No, music theory's incomprehensibility is of another order. It is usually blamed on the nature of music and the apparent opacity of its inner workings, which require the use of specialized terms, nonverbal symbols, and insular concepts that exclude most academics from listening in. But music did not invent this language. Music is everywhere and for everyone, so why is its theory so impenetrable that only a few understand it?

The problem with music theory is that it is *fundamentally* incomprehensible. What is basic is not basic — it is already too difficult. There is no passing note long enough or consonant skip high enough for the uninitiated to cross the divide and scale the walls of the citadel. To be clear, there is nothing wrong with these “basics.” Who would want to hold anything against a passing note or a triad? They work just fine. After all, that's what they are supposed to do — *work*. But that is the problem. Everything *functions* in music theory: harmonic functions, formal functions, tonal functions, chord functions, thematic functions. Theory is preoccupied with work, busying itself with what music *does*, and not what music *is*. If an alien were to land inside its walls, ze (the gender-neutral pronoun seems appropriate here) would see a strange world populated with human doings, rather than human beings. The graffiti in its streets would read: “Utility rules. Ontology sucks.” Its ivory towers would espouse the maxim: “To do is to be.” Technique would be its law and labor its politics. But there would be no meaning, because the basic questions — the “What?” and “Why?” of being — are lost in the hum of activity.

It didn't used to be this way. In the past, music theory was all about being. That long piece of string fixed permanently at either end of the universe may not have done much, but it was the basis

for everything. Everyone had their being in its vibrations. It was as simple as 1:2:3. But now, with its technical turn, music theory has become a highly specialized skill, as arcane as $\hat{3}-\hat{2}-\hat{1}$. (An in-joke for music theorists; if you didn't get it, then it proves the point.³) As long as theory obsesses over technique (doing) with a disregard for ontology (being), then what it considers "basic" is simple only to those already in the craft and is incomprehensible for those outside its industry. By failing to address what music is, what passes as a fundamental concept is not fundamental at all. Even something as simple as a passing note involves a highly complex operation requiring a vast technical apparatus to support its tiny steps. These "basics" are so high on the theoretical ladder that one wonders whether its base is still grounded in anything, since without "being," there can be no ground. And if you look carefully, theory has no legs to stand on. It simply uses *technique* to pull itself up by its own bootstraps. It manufactures its own standardized models, mistaking "normativity" as a form of self-rule when there is nothing "normal" supporting its claims. Hence, theory can guarantee music's autonomy only by binding its procedures with technical rules and formal laws to create a dense, disembedded, impenetrable structure. It is incomprehensible.

But this incomprehensibility points to a deeper incomprehensibility within theory itself. *Music theory does not know what music is*. Or rather, as a theory committed to technique, its "basics" are so specialized that it narrows down what counts as music; its tools are designed for a limited span of mostly Western art music and only when they are encased in the form of musical works. Theory, then, legitimizes only that which it can analyze (the canon of Western art music) and excludes most music in the world which it cannot recognize. Music is everywhere and for everyone except in music theory where it is incomprehensible — even to itself.

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The Ministry of Works

Mr. Stravinsky, I believe your bi-tonal chord contravenes Section 7-32 of the ordinance for sacrificial dancing in a public space.

It is a serious situation when theory is both epistemologically insignificant and ontologically ignorant. What should be the theoretical life of music, unifying its diverse manifestations, has lost its purpose. Structurally boring and fundamentally incomprehensible, music theory has failed music. It is unable to provide a common platform from which to theorize music across the disciplines with basic concepts that are equally meaningful to all music. Music theory fails as theory.⁴



Exactly at 8:56 a.m. on September 5, 1977, the Voyager 1 space probe rocketed into space. This official launch followed on the heels of the craft's identical twin, Voyager 2, which was sent ahead a few days earlier as a trial balloon. While music theory was boldly orbiting "the music itself," the astronomer Carl Sagan sent music in the opposite direction — into outer space. A gold-plated audiovisual disc with a selection of music ranging from J. S. Bach to Chuck Berry and from Mexican mariachi music to Indian raga, as well as the wails of babies, the song of whales, brainwaves, and ocean waves was placed

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on board Voyager, along with a ceramic stylus-and-cartridge unit and nonverbal instructions (Figure 1.3), on how to reproduce the sounds. If nothing else, any intelligent life-form that intercepts the space probe will learn from humans how to make a gramophone before eating the disc for breakfast.⁵

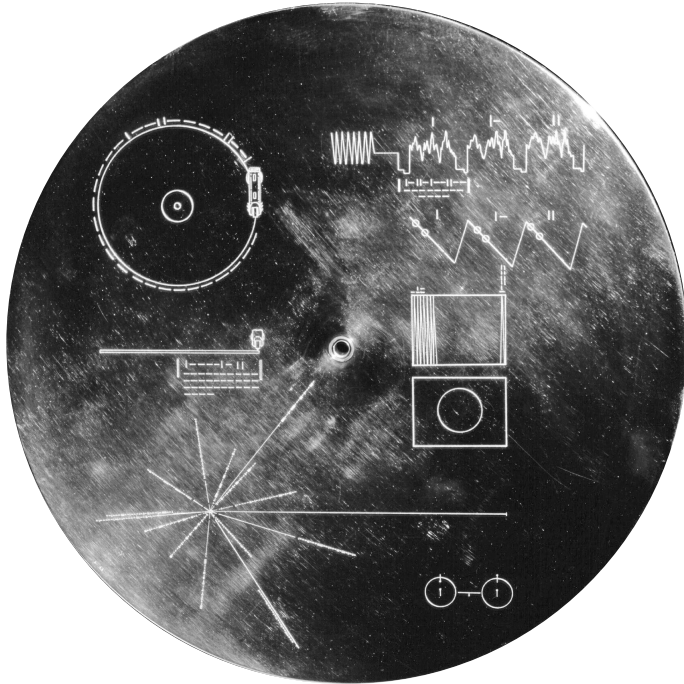


Figure 1.3. NASA's Golden Record with instructions for playback (image: NASA/JPL).

Currently, the two Voyager spacecraft are silently gliding in interstellar space, “destined,” as NASA puts it, “to wander the Milky Way,” although Voyager 1 is vaguely directed to pass within 1.6 light years of the star Gliese 445, and Voyager 2 within 1.7 light years of the star Ross 248. In about forty thousand years, NASA tells us, the Voyagers will be closer to those neighboring stars than to our sun.

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Music theorists did not pay much attention to NASA's exploits at the time; they were probably too obsessed with "human doings" to imagine an interstellar music theory for aliens. Conversely, Carl Sagan did not include any music theory with the instructions; there was no Schenkerian fundamental structure for Beethoven's Fifth Symphony or Fortean pitch-class-set theory for the *Rite of Spring*, which would have been de rigueur in 1977 among theoretical circles. Sagan's team probably realized that this type of music theory would have been incomprehensible, if not utterly boring, to the average alien. Perhaps they also figured out that there was no single theory capable of explaining the representative samples of music encoded on the disc. If Beethoven and Stravinsky already require different theoretical models, what would a didgeridoo from Australia or pan-pipes from the Solomon Islands or Louis Armstrong and His Hot Seven demand of music theory? Not only is theory inadequate to the task, it would become increasingly disparate if it attempted to explain the diverse music on the record, resulting in a proliferation of discrete techniques. A golden textbook in several volumes would have to accompany the golden disc. Music theory would ultimately alienate the alien.

Earth was never music theory's home, given its cosmic pretensions in its formative years. It can never return nostalgically to its premodern existence, of course, but theory can look back to the future and reimagine a different space, knowing that its current position is not its native home. Sagan and his team expressly hoped that extraterrestrials might analyze the music of the Golden Record. So what would a music theory for aliens be like? How would another life-form begin to understand the music in that probe with the golden disc — not just the Beethoven and Stravinsky, but Senegalese percussion, rock 'n' roll, gamelan, Navajo chant, and, arguably, the music of nature itself? What would the fundamentals of this music be, given a distant galaxy with life-forms that have evolved ears in a different planetary system? Such questions, which an intergalactic music theory of everything (IMTE) poses, are clearly bizarre and appear impractical. Why posit

an extraterrestrial music theory, particularly as we are unlikely to be discussing Chuck Berry with an alien anytime soon?⁶ There are two reasons.

The first reason is strategic. IMTE is needed to stop music theory from muttering to itself in a corner. An intergalactic impulse should propel theory at warp speed to the cutting edge of the humanities. Recently, the humanities have called into question the very humanity from which it derives its name. The human subject that claims to be the center of the universe is far too arrogant a being to entertain in an age where its powers have wreaked such havoc on the environment that it has inaugurated its own geological timeframe — the Anthropocene. The “posthuman” turn in the humanities is, in fact, far more human than its previous incarnation, dethroning that godlike subject and replacing it with a human who is more creaturely and more environmentally friendly — a reduced being, recyclable in time, reusable in nature, at one with biodegradable matter.

An IMTE acknowledges the posthuman and the Anthropocene, but it also whizzes past them in its spacecraft, waving out of the window as if to say “Been there! Done that!” With IMTE, the posthuman is surpassed by the extraterrestrial, and the geological is outshone by the intergalactic; its frame of reference is measured not by thousands of earth years, but by thousands of light years. By the time some alien beams back the message “Send more Chuck Berry,” the Anthropocene may be over. As a vision that extends beyond the posthuman and the Anthropocene, IMTE can have an epistemological impact from a perspective and scale that encompasses the sciences and humanities and so move beyond its own disciplinary boundaries.

If the first reason is strategic, repositioning the epistemological relevance of music theory, the second reason is practical, addressing the question of incomprehensibility. If we can design a theory that can explain music to an alien, it should be comprehensible for humans. The alien hypothesis provides a defamiliarizing frame that enables us to rethink theory from the basics. This would be a theory that has to work at any point in our universe, based on properties that

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we might share with an alien. It forces us to return to the fundamentals of being, of physics, of time, space, and matter. It obliges us to reevaluate what music is, particularly because any sound reproduction from Voyager's golden LP is unlikely to sound like anything we know on Earth. The differences in pressure, density, atmosphere, and evolutionary adaptation alone are enough to ensure that the Second Brandenburg Concerto — the first track on the disc — is Bach, but not as we know it. If music theory is wide enough to encompass such redefinitions of what music is, then it might finally open up a transdisciplinary platform where music can be a shared discourse that is everywhere and for everyone — on Earth.

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