

An Astronomer's Guide to Holst's *The Planets*

By James Reid

Those who love both astronomy and music can point to very few musical compositions with direct references to astronomy. One can cite a few examples of music with quasi-astronomical titles, such as Haydn's "Mercury" symphony and Mozart's "Jupiter" symphony, but these names are fanciful additions by others, not related to their composers' own musical conceptions. The most familiar music conceived on an arguably "astronomical" subject is *The Planets*, an orchestral suite in seven movements by the British composer Gustav Holst (1874-1934). Composed between 1914 and 1917, on holidays and weekends sandwiched between Holst's daily grind as a British school music teacher, "The Planets" is far and away the best known of Holst's works.

It would be gratifying to report that Holst was an avid amateur astronomer who got his musical inspiration from the glorious night sky. In actuality, the composer repeatedly stated that the initial impetus for *The Planets* came from the astrological (alas) character of the planets. Moreover, Holst's eyesight was so bad that, according to his daughter (and biographer) Imogen, he could hardly recognize members of his own family across a room without his glasses on. It is unlikely he could ever have become a keen observational astronomer.

Yet some years after composing *The Planets*, Holst read James Jeans's then-popular introduction to astronomy, *The Mysterious Universe*, and according to Holst's biographer Michael Short, "Holst realized with excitement that the ideas which were put forward in scientific terms were exactly the same as those which he had been trying to express in music many years before." Short adds, "this transcendental evocation of the vastness of space is an evocative example of the power which music has to express concepts beyond the comprehension of the rational mind." Short goes on to point out that "the enormity of the universe revealed by science cannot readily be grasped by the human brain, but the music of *The Planets* enables the mind to acquire some comprehension of the vastness of space where rational understanding fails."

The immediate impetus for “The Planets” came during a vacation trip to Mallorca, a gift from Holst’s wealthy friend, fellow composer, and benefactor, Balfour Gardiner. The brothers Arnold and Clifford Bax joined Gardiner and Holst on the vacation to Mallorca in March-April 1913. Arnold Bax is a significant composer whose music is still highly valued in Britain, if to a lesser extent elsewhere. The only non-musician among the four, the writer Clifford Bax, tried to convey his deep interest in astrology to the group. Gardiner is reported to have scoffed at the whole idea, but Holst felt willing to keep an open mind. The group is said to have held deep discussions on various subjects on their Mallorca veranda from early evening onward, ranging from astrology to the threat of impending war in Europe.

Although there is no direct substantiation, one hopes that Holst’s companions, or perhaps even Holst himself, knew enough rudimentary astronomy to see some real planets in the sky. Early evenings around 1 April 1913, brilliant Venus was high in Mallorca’s western sky, over 35 degrees above the Sun, with Saturn some 10 degrees higher, making a beautiful pairing for anyone with a rudimentary knowledge of astronomy. The other naked-eye planets did not rise until after midnight, and Mercury, as usual, was too close to the Sun to be glimpsed. The Pleiades and Taurus (with its bright red giant star Aldebaran) were nearby. One hopes that Holst’s eyesight, aided by his glasses, was at least good enough to see the two bright planets against their starry backdrop in the western sky.

Here are the seven movements of *The Planets* in Holst’s order, with their subtitles:

Mars, The Bringer of War
Venus, The Bringer of Peace
Mercury, The Winged Messenger
Jupiter, The Bringer of Jollity
Saturn, The Bringer of Old Age
Uranus, The Magician
Neptune, The Mystic

Recent writers on Holst have tried to make much of his self-avowed interest in astrology, but I think that Holst’s actual interest in astrology as it relates to *The Planets* extended very little beyond a springboard it provided for his composition. Holst knew that many listeners would question parts of his

work. Reference to astrology gave Holst a convenient justification for some aspects of his musical conception not in accord with contemporary public and critical expectations.

Holst's generation was influenced by the work and personality of the great German operatic composer Richard Wagner (1813-1883), with a Teutonic mythological, philosophical, and literary apparatus that was taken very seriously by many intellectuals of the time, not only musicians. In common with many others, Holst rebelled against Wagnerianism as he matured as a composer. He would have been particularly on guard against a comparison with Wagner's romantic-erotic Venus, familiar to Holst's generation as she is portrayed in Wagner's opera *Tannhauser*. Wagner's Venus has nothing in common with Holst's "Bringer of Peace." Likewise, Holst would have been wary of comparisons of his joyous dance-like Jupiter with the arrogantly heroic Wotan, king of the Norse gods, as portrayed in Wagner's epic, four-opera cycle, *The Ring of the Nibelung*. *The Planets* was composed almost entirely during World War I. Anti-German feeling in Britain was never higher. During the war Holst, a third-generation Englishman, even took the step of legally changing his name from "von Holst" to "Holst," to avoid any possibility that he could be taken for a German. Holst was determined to let no hint of Wagner's brand of German ideology into his music.

Holst took a bit from astrology as it helped to serve his own needs, but, in the end, it was very little. Recent writers have tried to link Holst's music to chapter titles and descriptions of the planets in contemporary astrology books he may have owned, but their remarks about each planet's astrological character generally have little or nothing in common with the character of Holst's music. Once he had decided on a basic plan, Holst let his own imagination and conception take their course. His conception brings to bear as well some of the cultural and classical mythological attributes of the planets (but not from Germany or Wagner). His conception also has arguably more relevance to astronomy than is often recognized.

Astronomy and Holst's "Planets"

The arrangement of Holst's seven planets will seem odd to astronomers, since it does not correspond to the astronomical ordering from the Sun outward. Holst orders the planets outward from Earth. Technically, as we know, Venus is on average closer to us than Mars. But I think we can give Holst some slack on this point, since Mars is much more effective musically

as the first planet, with Venus then giving immediate and welcome contrast. Earth is not included. Another reason Holst had recourse to astrology was to justify this exclusion. I believe Holst conceived *The Planets* looking up from the viewpoint of mankind and the resonances that the planets can have in the human mind. So Holst need not consider the Earth, regardless of its actual planetary status or whether or not it has astrological significance.

Holst also excluded the Sun and the Moon, which are very important “planets” in astrology, though not in astronomy. Holst fully recognizes this astronomical fact and excludes them. Here is yet another reason for believing that astrology had little to do with the work, since the composer gives us only the proper seven non-terrestrial planets then known to astronomy.

Holst’s composition ends with Neptune. Astronomers will be well aware that Pluto was not discovered until after the time of the composition of *The Planets*. Holst still was active and had a few years to live when Clyde Tombaugh discovered Pluto in 1930, but it is doubtful that he ever considered adding an eighth non-terrestrial planet to his suite. *The Planets* was long behind him, and his total body of work shows that he was anxious not to repeat himself or tread again on already worn ground. Perhaps it is ironically fitting that Pluto’s status as a full-fledged planet has in recent years been cast into doubt, and it has been officially demoted from planetary status. So from a technical viewpoint, astronomy is now back to the original seven non-terrestrial planets known to Holst at the time he composed *The Planets*. Barring discovery of a remote giant trans-Neptunian object, the planets will always remain as Holst knew them.

A Brief Tour of Holst’s *The Planets*

Astronomers who also enjoy music will surely want to know about “our” piece in detail, including how it should be performed. Below I will discuss each of Holst’s *Planets* from a musical viewpoint and its performance as given in eight recordings (See Table A). Through good fortune, we have two 1920s recordings conducted by Holst himself. In spite of their antique sound quality, these priceless documents can directly convey to us the composer’s own conception of *The Planets*. Other later conductors vary widely in their “interpretation” of the work. They differ most obviously in tempo — often drastically so in Mars, Jupiter, Saturn, and Neptune. Since I believe Holst’s second (1926) recording is “right” (and who can argue with the composer

himself?), I have given his timings for each movement in Table B, so that the reader can compare his tempos with selected later recordings. Holst's tempos are invariably fast compared to almost all later recordings. Some have tried to argue that Holst's fast tempos result from 1920s recording industry pressure to keep within the time limit of that era of four minutes per side, yielding eight minutes per two-sided disc. This argument is disproved by many other recordings from around 1926 that use the full four minutes per side. If Holst had wanted, say, eight minutes for his discs of Mars or Saturn, instead of about six or seven respectively, he could easily have recorded them that way.

My selection of recordings is skewed to give several recordings in accord with the composer's own, at least in most movements. Sir Adrian Boult, a friend of the composer, conducted the first performance of *The Planets* in 1918, and recorded it commercially at least five times between 1945 and 1978. Boult is often taken as "authoritative." However, he is often at odds with the composer's versions, and I believe he adversely influenced many later conductors. Although only the last of the Boult recordings is given in our list, a look at all of them would reveal great inconsistencies from one to another.

The 1996 recording conducted by Roy Goodman is a special case. Goodman set out to emulate the composer's 1926 recording, including the tempos, and his orchestra uses museum instruments or replicas of the type of instruments used around the time of Holst's recording. We are unlikely to ever get much closer to Holst's own intentions and interpretation than Goodman's performance. For anyone interested in this music, Goodman's is a must-hear recording.

I must stress that most other conductors get many if not most of *The Planets* wrong. Buyer beware. The vast majority of the dozens of other recordings of "The Planets" are generally too slow — as exemplified in my list by the recordings conducted by David Lloyd-Jones and Simon Rattle (except marginally Neptune). Some examples on the list of too-slow performances of individual Planets include Boult (Mars, Saturn, and Uranus) and Solti (Venus, Saturn, and Neptune), among others (see Table B). Looking beyond my list, a rough average of timings of about 25 modern recordings is as follows:

Mars Venus Mercury Jupiter Saturn Uranus Neptune

7:15+ 8:30 4:00 8:00+ 9:15+ 6:00 8:00+

Compare these to Holst's 1926 timings, and it becomes obvious that most later conductors are not playing *The Planets* correctly.

Included below are some admittedly fanciful comments of my own from my viewpoint as a trained musician and life-long amateur astronomer. Attaching any extra-musical associations to a piece of music invites controversy. Music is, to musicians, absolutely precise and unequivocal in expression, in and of itself. Extramusical associations tend to be both personal and variable. However, when a composer associates his music with specific objects in the physical world, I believe we are justified in allowing our imaginations to find personal analogues or associations between the music and the objects — in this case, the seven planets. I think many astronomers will share at least some of my sense of the work, and will develop their own sense of it from their own personal astronomical viewpoints.

Mars, The Bringer of War

A stark premonition of mechanized warfare, Mars was actually composed just prior to the outbreak of World War I in August 1914. Impending war was in the air, though, and was a subject of discussion by Holst and his friends during their Mallorca vacation in 1913. The relentless, five-beat pattern, the ominous thump of the drums and strings, the wailing brass — all contribute to a powerful sonic image of war.

The fast tempo that Holst takes in his 1926 recording (the earlier one is almost identical) is confirmed by a tempo marking he made in a two-piano arrangement of the work. Sir Adrian Boult, Holst's friend and the first conductor of "The Planets" in 1918, is evidently responsible for a "tradition" of taking Mars much slower (see especially his 1978 recording, the last and slowest of at least five the long-lived Boult led over the years). The great majority of conductors since 1980 play Mars too slowly — at least seven minutes, often pushing eight like Boult — turning Mars almost into a different piece.

Stokowski and Solti are among the few to ignore Boult and instead approach the composer's own tempo in Mars. However, Stokowski also retouches Holst's orchestration in a few spots. Goodman, who consciously and deliberately emulates the composer's 1926 recording throughout, is right on

target here; likewise Steinberg is close. Solti had the advantage of hearing Holst's recordings and talking with Imogen, who vouched that his fast tempo in Mars was close to that used by Holst in the live performances she recalled. (Unfortunately Solti did not pay attention to Holst's recording in some of the other movements.)

Our Red Planet gets a fitting musical analogue in this menacing music. Baleful Mars, with his companion moons Phobos (Fear) and Deimos (Terror), could hardly be better imagined in music. One of my earliest astronomical memories is the great Mars apparition of 1956. I was also fortunate to see the New York Hayden Planetarium show on Mars in August, 1956, right at the end of the era before spacecraft finally proved once and for all that there were no artificial canals. Recalling 2003's spectacular apparition of Mars, with its dire red glow, and its apparition in the winter of 2009-10, many others may sense a correspondence to Holst's musical vision.

Venus, The Bringer of Peace

She enters with quiet beauty in the solo horn, answered by a lovely descent in the flutes. Throughout this is music of calm and sensuous grace. More complex in form than Mars, the movement possibly suggests the idea that peace is a more complex process than war. Along the way, a number of fine wind and string solos join to sing her song of peace to us. The celesta adds a particularly lovely shimmer to the sound. Holst's 1926 recording shows the proper tempo and gives the overall concept, as do Steinberg and Goodman. Boult, after slow efforts in some of his earlier recordings, finally got it right in his last try in 1978. Here is our dazzling "Evening 'Star'" robed in luminous "white" music of exquisite poise and clarity.

Mercury, The Winged Messenger

Holst superbly captures the swift pace of the innermost planet in this "scherzo" (a musical form using a very fast-paced underlying three-beat meter). Here the 1920s technology and the challenged string players of that era serve Holst poorly. Even though this is the least successful movement in Holst's 1926 recording, his tempo is clear and fast. Goodman is the only conductor to match Holst's tempo, but in Mercury's case, the variation among the other conductors is not so great, and anything timing about 3:50 or under is an acceptable tempo. The innermost planet, which zips so

quickly from morning to evening sky and eludes all but the determined observer, is here captured in sounds aptly fleet and elusive.

Jupiter, the Bringer of Jollity

In his subtitle, the composer writes “Jollity,” avoiding the word “Joviality,” which might be thought a tautology. But “joviality,” and its etymological association with the word “Jupiter,” is an impulse at work in this music. Holst was an expert in English folk music. Although he does not quote actual folk tunes in Jupiter, he composes in the spirit of such music. Jupiter is a set of idealized folk dances. The central dance, in a three-beat meter, is the “Big Tune,” the most famous part of the entire work. Holst’s printed score and the 1926 recording clearly show that the music should not markedly slow down here, as almost all other conductors do, but should continue at the same underlying pace.

In the wake of the ending of what was then called the Great War, in the early 1920s, Holst was commissioned to set to music the following patriotic poem:

I vow to the my country, all earthly things above,
Entire and whole and perfect, the service of my love;
The love that asks no question, the love that stands the test;
That lays upon the altar the dearest and the best...

Holst really had no interest in this project but felt he could not decline. Casting about for ideas, he hit upon the possibility that the “Big Tune” from Jupiter can be made to fit these words. Out of consideration for British patriotic sensibilities, I will refrain from comment on the verse (although some British commentators on Holst have deplored it). Poetic quality aside, the sentiment of the words is foreign to the composer’s concept. The “Big Tune” should be another in the sequence of dances that make up the movement, and not a patriotic hymn.

Holst’s 1926 recording is a revelation. Jupiter is brisk, bracing, and above all, dances. When the composer reaches the “Big Tune,” he presses ahead in the same vein. Toward the end of the movement, the heavens seem to open and we hear a reminder of the “Big Tune” in the low instruments and brass. Then the music accelerates and concludes with a very fast ending, and here Holst’s 1926 recording, and Goodman’s, are truly exhilarating. Several

others in our list, especially Solti, present Jupiter fairly well, despite slowing the “Big Tune.” The giant planet, usually second only to Venus in apparent brightness, gets a Jovian musical setting in keeping with its size and splendor. The grand “Big Tune” is itself a fitting musical analog of the greatest of the Sun’s planets.

Saturn, the Bringer of Old Age

Holst’s friends and confidants, including his daughter Imogen, judged that Saturn was the best and most “modern” movement of the suite. Saturn is certainly a fine piece, a funeral march in keeping with a distinguished line of similar pieces that were current in the early years of the 20th century (Mahler in particular comes to mind). Later in Saturn, four flutes produce a phrase that sounds like an archaic funerary chant. This chant leads to a shattering climax of crashing brass chords and frantic cries by the strings. Viewing the Ringed Planet perhaps casts a less-somber mood than Holst’s music, but toward the end, when the music opens up into a major key and the brass and strings soar with a broad and consoling variant of the opening bass motive, it has often brought to my mind the shimmering rings of Saturn, not long ago revealed anew to us by NASA’s Cassini spacecraft.

Along with Mars and Jupiter, Saturn is one of the most maligned movements in terms of performance and recording. Many conductors, probably following Boult’s examples (though not as much in his 1978 recording), take the piece too slowly, some taking as much as 10 minutes to plod through this music. The march character is then lost and the music loses much of its point. Solti and Rattle, in approaching nearly 10 minutes for Saturn, are unfortunately the norm among most modern recordings. Holst’s recordings show that Saturn has a true march character, sad though it may be. For me, Holst’s elegy for the dead of World War I is Saturn, not the sentimental poem later grafted onto Jupiter.

Uranus, the Magician

Uranus is a parody of English military music, to which Holst adds the grotesque comedy of the bassoons, and sudden, humorous contrasts. Dukas’ “Sorcerer’s Apprentice” (famous from Disney’s “Fantasia”) is an obvious precursor, but the idiom is purely Holst’s own. His “magician” seems to strut around in his peaked hat, perform sudden loud tricks and go up in a

puff of smoke, only to re-appear with a shock, before he slowly vanishes into thin air.

This music bears perhaps the least relevance of any in the suite to the actual planet, although in the 1910s little enough concrete astronomical knowledge about Uranus was available even to those who sought it. Uranus is among the most consistently performed Planets and seems to suggest a tempo that yields somewhat less than six minutes. I believe Holst's tempo in 1926 is correct, and there is no way to justify much slower efforts by such conductors as Boult. Goodman gets it right, but I think even faster tempos by Stokowski, Solti, and Steinberg are also effective and acceptable. Certainly these are preferable to the too-slow approach of Boult and others, which takes much of the fun and humor out of the music.

Neptune, the Mystic

Here again is music that, in my mind, can be an analog of the remote blue-green planet itself. Whatever he may have thought about "mysticism," Holst's Neptune draws on the mythological God of the Sea to provide us with a watery wash of sound and color. Holst may have been influenced here by "Sirenes," the third of Claude Debussy's orchestral "Nocturnes" of 1900. Debussy, inspired by the famous passage in Homer's *Odyssey*, uses a wordless women's chorus, as Holst does in Neptune. At the end of Neptune, the score instructs the chorus to continue repeating its phrase ever softer until the music becomes inaudible. Debussy notwithstanding, the sound world of Neptune is Holst's own. To me Neptune, not Saturn, is musically the most advanced and forward-looking movement in the suite.

Holst's recordings show emphatically that Neptune is not a "slow" movement, as it is played by many later conductors. Beginning at "Andante" ("walking"), when the chorus enters the score is marked "Allegretto," which means "fairly briskly" and definitely not "slow." Actually, the primitive technology of Holst's 1926 recording makes the timing seem even faster than it really is, because it does not get the ending right. Sound engineers had great difficulties in the 1920s in recording a true "fade out" of the type that Holst wanted. Had Holst's recording captured this effect properly, then its timing would probably have approached six minutes. This problem, along with Mercury's ragged string playing and too-loud last chord, are the only major places in the 1926 Holst recording that fall well short of the composer's intentions. Boult gets Neptune about right, as, of course, does

Goodman. Stokowski is all right until the very end, when he ignores Holst's explicit instructions and has the chorus make a clearly resolved ending — a “cadence” in musical terminology. This is inexcusable, but the rest of his performance has much to recommend it. Stretching Neptune to eight minutes or more (Solti and many others) is not right.

According to biographer Michael Short, “In Neptune, Holst's aim was to depict in music the mystery and wonder of outer space,” an aim well realized. For the astronomer, Holst provides a sense of Neptune that leads us to the edge of the solar system and then echoes onward and outward into the vastness of space beyond.

Pluto, the Renewer

Although Holst probably never considered adding Pluto to the suite, the British composer and Holst devotee Colin Matthews (b. 1946) in 2000 produced a “Pluto” of his own composition. There are several recordings of the piece as an “addendum” to *The Planets*, including those by Lloyd-Jones and Rattle. While a purist would question adding to Holst's work, Matthews has provided a piece that reasonably fits into the work's scope and mood. In notes for the inexpensive Lloyd-Jones recording, Matthews says that he “chose to make Pluto faster even than Mercury, thinking of solar winds, and perhaps the sudden appearance of comets from even more outlying reaches of the solar system.” He concludes with the final chord of Neptune, as if “sustained in the distance.”

Unfortunately, much of the rest of Lloyd-Jones's performance is poor, with many too-slow tempos, too-loud percussion, and other defects. Similarly, Rattle is almost invariably much too slow throughout *The Planets*. However, I think most astronomers can join me in enjoying hearing Matthews's new “appendix” from time to time, while still preferring the pristine original as revealed on record by Holst and Goodman. Ideally, all who love “The Planets” should have both the Holst 1926 recording, to know how the work should go, and the Goodman recording, to hear it played correctly in state-of-the-art modern sound.

The recording of *The Planets* to own if you get just one is Goodman's. The physical CD is very hard to find, but happily the Goodman recording is readily available for download online, as are Holst's 1926 recording, Steinberg's, Stokowski's, Lloyd-Jones's, Rattle's, and Boult's 1978

recording. (The Steinberg CD includes a stunning “Also Sprach Zarathustra,” by Richard Strauss, which begins with the familiar opening fanfare used in the famous Kubrick film *2001: A Space Odyssey*.)

Any astronomer out there with enough musical training to read a full orchestral score will be amply rewarded if they buy the inexpensive score of *The Planets* (Dover, 1996) and follow along with any of these recordings. But in a much broader way, my hope is that the work will find many new listeners among astronomers who may not have heard it before, and that those who have will return to it and find even more in this musical tour of *The Planets*.

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Table A **Selected List of Recordings**

(conductor, orchestra, chorus, publisher’s catalog number, year recorded)

Boult, Sir Adrian, London Philharmonic Orchestra, Geoffrey Mitchell Choir, EMI CDM 7 64748 2, 1978. Download title: “Great Recordings of the Century: Holst - The Planets.”

Goodman, Roy, New Queen’s Hall Orchestra and Chorus, Carlton 30366 00432, 1996. Download title: “Holst: The Planets & St. Paul’s Suite.”

Holst, Gustav, London Symphony Orchestra, uncredited chorus (probably St. Paul’s School Chorus), Koch 3-7018-2 H1, 1926. Download title: “Holst Conducts Holst.”

Lloyd-Jones, David, Royal Scottish National Orchestra and Chorus, Naxos 8.555776 and online download, 2001.

Rattle, Sir Simon, Berliner Philharmoniker, EMI online download, 2006.

Solti, Sir Georg, London Philharmonic Orchestra and Choir, London (Decca) 425 152-2, 1979.

Steinberg, William, Boston Symphony Orchestra, New England Conservatory Chorus, Deutsche Grammophon 289 463 627-2, 1971. Note: iTunes mislabels the Orchestra as the “Boston Pops.”

Stokowski, Leopold, Los Angeles Philharmonic, Roger Wagner Chorale, EMI CDM5 65423 27, 1956. Download title: “Absolutely Classical, Vol. 133”

Note: The CD catalog numbers given above are from the CDs in my library. Most pre-1980 recordings have been repeatedly issued in various formats through the years. An online search can quickly turn up these or other editions, as well as the above-mentioned online downloads, although buyers of Boult’s recording should check the date carefully if they want the 1978 recording discussed herein, since at least four other Boult recordings from the 1940s through the 1960s are in circulation.

Table B
Timings of The Planets from the Recordings*

	Mars	Venus	Mercury	Jupiter	Saturn	Uranus	Neptune
Conductor/year							
Holst 26	6:07	7:13	3:29	6:55	6:51	5:51	5:29
Stokowski 56	6:34	8:01	4:01	7:35	7:45	5:40	6:33
Steinberg 71	6:37	7:25	3:59	8:01	7:45	5:24	6:47
Boult 78	7:58	7:21	3:43	7:54	8:18	6:22	6:21
Solti 79	6:41	8:22	3:49	7:15	9:49	5:34	8:02
Goodman 96	6:18	7:33	3:33	7:28	7:19	5:50	6:14
Lloyd-Jones 01	7:03	8:32	3:59	8:00	9:21	6:12	6:53**
Rattle 06	7:25	8:59	4:02	8:02	9:35	6:04	7:02**

*The timings in Table B are taken from the documentation accompanying the CDs listed in Table A, except for Rattle’s, which are listed online.

** Followed by Pluto (composed by Colin Matthews); timing 6:53 (Lloyd-Jones) and 6:12 (Rattle).

Brief Bibliography

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Jeans, James, *The Mysterious Universe*, 1930, reissued by Cambridge University Press, 2009.

Short, Michael, *Gustav Holst: The Man and his Music*, Oxford University Press, 1990.