

**Gustav Mahler: Symphony No. 3 in D Minor**  
**Richard Strauss: Death and Transfiguration**

Jascha Horenstein, Conductor  
London Symphony Orchestra  
Norma Procter, Contralto  
Ambrosian Singers, John McCarthy, Conductor  
Wandsworth School Boys Choir, Russell Burgess, Conductor  
William Lang, Flugelhorn solo  
Dennis Wick, Trombone solo  
John Georgiadis, Concertmaster and violin solo

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Recorded at Croydon, London on July 27, 28 and 29, 1970 at Fairfield Concert Hall, Harold Lawrence, producer (for Unicorn recording); Deryck Cooke, special consultant. Separate recording made at same sessions as Unicorn recording, on Scully four channel reel-to-reel recorder at 15 IPS. Recording Engineer: Jerry Bruck, Posthorn Recordings (recorded at the invitation of John Goldsmith, general manager of Unicorn Records).

Transfer of session tapes by Robert Witrak, Chief Engineer, HDTT, at 24/192 (late 2020). Editing of session tapes and restoration by John H. Haley, President, Harmony Restorations, LLC (2020-2024), except editing of Mvmt. III by Jerry Bruck (1970's).

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**MAHLER**  
**Symphony No 3**

**R. STRAUSS**  
**Death and Transfiguration**

**Jascha Horenstein**  
**London Symphony Orchestra**

*First Release - As Recorded by  
Engineer Jerry Bruck*



Jascha Horenstein's classic 1970 LP recording of Mahler's Symphony No. 3 with the London Symphony Orchestra, on the small British Unicorn label and released on LP in the U.S. on the Nonesuch label, is a much-loved recording. It was recorded in six sessions that occurred on July 27, 28 and 29, 1970 at the Fairfield Concert Hall in the London suburb of Croydon, by well-known audio engineer Bob Auger and his team, with Harold Lawrence producing and Mahler authority Deryck Cooke in attendance as musical advisor. The Unicorn recording was multi-miked and recorded in eight tracks, mixed down to regular stereo for LP release.

A separate recording using totally different mics and recording equipment operating in a separate control room was made concurrently at the same recording sessions by a leading American recording engineer, Jerry Bruck, who was invited to do so by John Goldsmith, the founder and general manager of Unicorn Records. Except for a borrowed four-track Scully recorder, Bruck brought his own equipment with him from the U.S., including microphones. He employed a unique mic set-up to achieve a spectacular four-channel recording that has never been released or even heard before by the public, until now. His recording, made on half-inch tape running at 15 IPS was called an experimental recording, "a practical test of tetrahedral ambiophony." (Bruck's four-channel recording is unrelated to a Quad mixdown of



Deryck Cooke  
British musician, musicologist,  
and Gustav Mahler expert.

the Unicorn recording that was released on a Japanese-made Quad LP by JVC, available briefly in the 1970's, which in this writer's view does not measure up to the regular stereo Unicorn recording as a listening experience due to the inherent limitations of the Quad LP format.)

High Definition Tape Transfers, Inc. ("HDTT") is very pleased to be releasing the unheard Bruck recording of the Mahler Third, as well as Richard Strauss' *Death and Transfiguration*, which was recorded at the same sessions. The Mahler and Strauss pieces are released in a High Resolution format including all four channels, as well as in a two-channel stereo version. The sound quality captured by Bruck's outstanding skill as an audio engineer is stunning, and HDTT has of course maintained the very wide dynamic response present in his recording, in contrast to the compressed Unicorn recording.

The particular challenge in preparing this project for release has been that Bruck's session tapes were never edited down into finished recorded performances, except for the third movement, which Bruck himself had edited. As a result, all of the many session tapes were digitized in a high-resolution format, for editing. It will be recalled that Mahler's Third Symphony is his longest work as well as the longest symphony in the standard orchestral repertory.



Harold Lawrence, John Goldsmith  
Jascha Horenstein, and unknown

Fortunately, we have Mahler authority Deryck Cooke's editing notes from the original editing sessions, in which he assisted, for 5 of the 6 movements. However, for the long first movement, it was necessary to follow the editing heard in the Unicorn recording, which was arduous given the large number of takes and the many large and small edits. The result is worth the effort.

**Mic Array and Quadraphony:** Bruck used a unique mic set-up that captured the sessions with remarkably well-focused clarity. No fan of multi-miking, he used a fixed array of four hypercardioid Schoeps mics placed in the form of a tetrahedron (a "pyramid" with a triangular base) with a mic at each corner, about one meter apart, with cancellation at about 150° off axis, so the null of each microphone was at about the maximum point of sensitivity of all the other mics. This experimental array was situated relatively near the orchestra, with the two front mics recording the left and right channels, another one facing the rear wall of the hall in the same plane, and the fourth pointed straight up at the ceiling. Unlike some recording set-ups that place mics in the rear of the space to capture ambient signals, Bruck captured the ambient hall sound as reflected back to the nominal listener's ears from the hall's rear walls and ceiling, with that nominal listener seated roughly in the center of the mic array. The intent was to capture a hemisphere of sound where the nominal listener was situated, with the "up" and rear channels consisting entirely of reflected sound (an exception is the flugelhorn solos in the third movement; that instrument was situated in the back of the hall).

Consistent with Bruck's philosophy of minimal miking, the four-chan-

nel result is a study in phase coherence, which has been an essential ingredient for HDTT to maintain. However, because very few listeners have a full-range speaker mounted on the ceiling directly above the listening space, the "up" channel has been employed as an alternate rear ambient signal for more conventional multi-channel listening. This works well, as human beings do not have strong directional recognition of sounds coming from directly overhead (as this writer demonstrated for himself by mounting a matching speaker overhead), and the additional reflected hall sound captured in the "up" channel, which has a very similar delay factor and which has no recognizable "uppiness" characteristics to the ear, is still fully preserved and present in the audio recreation of the experience of sitting in the hall. And if a listener wants to reconstruct the original set-up, all that has to be done is route the right rear channel to an overhead speaker and the left rear channel to a center rear speaker; the two "hall" channels devoted to reflected sound are still intact, as recorded.

The effect of hearing all four channels is not to swamp the music in reverb but rather to add another dimension of clarity and realism, an effect that is clearly perceived when the rear channels are suddenly muted. The locational cues are of course still provided entirely by the front channels, as the direct sounds captured in those channels arrive to



Contralto soloist Norma Procter

the listener first.

Working on this project has given both Bob Witrak and me an enormous appreciation for the brilliant work of Jerry Bruck as a recording engineer. As explained below, Bruck is himself a highly respected Mahler authority, and as an engineer, in past decades he was clearly a visionary who was far ahead of his time. Listening to the sound quality he achieved in this alternate recording of Horenstein's Mahler Third, it is hard to believe that the recording is more than a half-century old. Both Bob and I have marveled at how Bruck achieved such remarkable results using the technology of that time—for example, the capture of such an enormous dynamic range in that pre-digital era without a hint of distortion, obviously based on a clear understanding of what was actually possible with the analog equipment he was using, or the pinpoint clarity of the sound-stage resulting from his “just right” mic placement and his precise understanding of what his mics could achieve. As listeners to this release will hear, Bruck believed in “getting it right” without compromise.

By John H. Haley  
Harmony Restorations LLC

### **Jerry Bruck Professional Profile and Involvement with Mahler**

Jerry Bruck was born in 1935 in St. Louis, Missouri. As a young man, a strong interest in electronics and recording technology, whetted by a consuming passion for classical music, brought him to KCFM, that city's first commercial “good music” station, where he served as Staff Engineer, Chief Announcer, and Program Director. After the station's format turned away

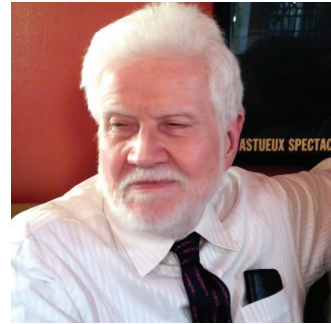
from classical, in 1961 he moved to New York City and joined WBAI-FM. After two years, he resigned to work full time in his growing career as a free-lance recording engineer.

As his credits for audio, film and video sound accumulated, Bruck joined the Audio Engineering Society. He served twice as a Governor of the Society, chaired its 91st Convention, and was three times elected Chairman of its New York Section, further serving as Advisor for many years.

In 1999 he received an AES Fellowship Award in recognition of his contributions to the field of audio engineering.

In time, in addition to his role as recording engineer, Mr. Bruck became a dealer in leading equipment for the recording industry. For more than a quarter-century, his Posthorn Recordings represented Schoeps condenser microphones in the United States, as well as a selection of leading related equipment for the recording industry.

Bruck's great interest in Gustav Mahler led him in other directions as well. He is a longtime member of the Gustav Mahler Society of New York and of the Internationale Gustav Mahler Gesellschaft in Vienna. In 1962, he presented the first radio broadcast cycle of Mahler's music over New York's WBAI-FM. These 14 two-hour programs featured extensive biographical material, including interviews with musicians and other people who knew Mahler. Research for this project led him to Mahler's widow, Alma. He



Recording Engineer Jerry Bruck

helped to convince her to rescind her ban on the completion of her husband's Tenth Symphony, after playing her a tape of the BBC broadcast of Deryck Cooke's realization of the work. He also began a lasting friendship with Mahler's daughter, Anna. His subsequent research brought him into close contact with musicians and scholars who further encouraged his avid interest in the music and life of the composer.

Bruck was directly responsible for the release of the suppressed first movement of Mahler's early cantata *Das klagende Lied*, as well as his early Piano Quartet. He assisted with the American premieres of these works as well as the reconstructed Symphony No. 10. He produced and engineered the first commercial recording of Mahler's five-movement version of Symphony No. 1 (including the "Blumine" movement) for CBS/Odyssey, and he co-engineered a later recording of the same work with James Judd leading the Florida Philharmonic for Harmonia Mundi. In 1971 he was awarded the Mahler Medal of the Bruckner Society of America.

Among Bruck's many recordings of Mahler's music is Joe Wheeler's performing version of the Tenth Symphony (to which he also contributed liner notes) performed at the Colorado MahlerFest. He also recorded Symphonies 2, 3, 5, 6, 7, 8 and 9, as well as *Das klagende Lied* and *Das Lied von der Erde*, in live concerts. Other CD releases of Mahler's music include his Third and Sixth Symphonies for Titanic Records (the latter also with Bruck's liner notes).

In addition to records and CDs, Bruck has recorded sound for music-oriented film and video projects. He recorded the live concerts included in Jason Starr's video *Of Love, Death and Beyond: Exploring Mahler's 'Resurrection' Symphony*, a DVD documentary about Mahler's Second Symphony available

from VAI. He appears briefly in the video to introduce several scenes. He also recorded *Das Lied von der Erde* with the Suisse Romande Orchestra conducted by Neeme Järvi, in Geneva, with soloists Thomas Hampson and Paul Groves, resulting in a DVD and Blu-ray released by VAI.

Bruck's most controversial project was a "White Paper" on Mahler's Sixth Symphony, "Undoing a "Tragic" Mistake," published and distributed worldwide by the Kaplan Foundation. Presenting the case to restore the correct order of its inner movements in modern performances and recordings, this research paper has been widely accepted as authoritative. The score published by C.F. Peters now shows the movements in their correct order, crediting Bruck's research.

### **Remembering John Goldsmith (1939-2020), by Misha Horenstein**

I would like to pay tribute to my late friend John Goldsmith, without whose inspiration, total dedication and foresight the present recordings would not have been made. John was the founder and moving spirit behind Unicorn Records, the tiny independent British label that did so much with so little means to further Horenstein's recording career when no other company was willing to take him on. Over the course of their four-year association, John published eleven Unicorn LPs featuring seventeen works conducted by Horenstein, including three Mahler symphonies. "I badly wanted to do all the Mahler symphonies with Horenstein," John wrote. "In the long run they would have been of inestimable musical value and also a financially sound proposition," a conclusion that went very much against generally accepted assumptions at that time.

By autumn 1969 John had already released Horenstein's matchless recording of Mahler's First on his Unicorn label, paid for entirely from his own pocket it should be noted, but he had to wait a further eight months before another opportunity arose to record more Mahler. This occurred when Horenstein conducted the Third with the London Symphony Orchestra at the Royal Festival Hall on 31 May 1970. I attended that concert, a spellbinding occasion that left me and most of the audience completely intoxicated and remains, over fifty years and countless concerts later, one of the greatest, most memorable musical experiences of my life. John was similarly excited and more motivated than ever, but financing a recording of the Third, the longest symphony in the repertoire, was way beyond his means. Never one to let practical considerations interfere with his dreams, John pressed on with the arrangements until providence stepped in when a stranger appeared, a young man of means and a devoted Horenstein fan, who offered to split the cost of recording the symphony if John could find the rest, which he eventually did but only by mortgaging his home! He was that dedicated.



John Goldsmith, c. 1970

To oversee the recording John assembled the same top-class production team that had worked on Mahler's First. Harold Lawrence, then manager of the LSO but here acting in his former guise as record producer, was joined by the highly respected audio engineer Bob Auger and, at Horenstein's request, Mahler expert Deryck Cooke, who served as musical

adviser. From the early planning stage John and Auger chose to employ the most modern recording techniques then available, to serve "as a kind of summary of the state of the art as it stands at the present." Auger's original recording was made on 8-tracks utilizing the "quadraphonic" process, an early version of today's 4.0 surround sound. When listening to the opening of the symphony in the control room Horenstein was startled by what he heard: "Mr. Auger," he said, "there are nine horns but you make it sound as though there are forty; I wonder what Mahler would think of that!" Auger's 8-track masters were subsequently mixed down to four and then two tracks to produce the stereo version that Unicorn offered to the public. The recording was warmly and enthusiastically received when it first appeared, but most critics expressed reservations about the quality of the recorded sound, specifically its somewhat dry, close-in acoustic, the unnatural highlighting of some instruments, the orchestral balance favoring the winds and brass at the expense of the strings, and the generally weak bass response. The 4-track "surround" version appeared in 1972 on a Japanese label but disappeared shortly thereafter when the quadraphonic process itself, due to its expense and complexity, failed to attract commercial interest. In the years since, the disappearance of Auger's original 8-track master tapes has frustrated all efforts to restore the recording to its original, multi-track splendor. Until now.

In another of his inspired decisions, inspired because it was so unusual, John agreed to let the American audio engineer Jerry Bruck try out, at his own expense, his own unique quadraphonic technique and to make his own recording of the symphony in parallel to Auger's. Bruck's recording, John reasoned, could also serve as a back-up should something go wrong with

Auger's. Not intended for publication, Bruck's session tapes remained unedited for fifty years, and all pleas to release them for publication were politely and rightly rebuffed as Auger's was the "official" recording, the rights to which resided with Unicorn.

Thankfully the passage of time makes its own laws and one can only be grateful to Jerry Bruck for having finally released his session tapes, and to John Haley and the directors of HDTT for having persevered against considerable odds, including Covid, in getting them edited and published, by no means an easy task. The result is truly spectacular, a vast improvement in sound and orchestral presence over all previous releases of this great document.

A word about Strauss's *Death and Transfiguration*. The work was a staple of Horenstein's repertoire and one he performed throughout his career and in every country he visited. My archive contains six recordings he made of the work, with most taking around 24 minutes. The recording presented here with the LSO had to be completed during the sixth and last of the Mahler Three sessions, which presented a problem for John. Musicians' Union rules permitted a maximum of 20 minutes use of recorded music during any 3-hour session and John had to explain to Horenstein that he would get a hefty overtime bill if the recording took longer. Horenstein became quite upset about this and said something to the effect that his interpretation "could not be compromised" but then agreed to make the recording anyway, which takes slightly over 22 minutes. This was faster than his usual timing but still too long for the MU. Fortunately, their representative in the orches-



Producer Harold Lawrence

tra, one of the players who was also close to John, turned a blind eye and allowed the infraction to pass under the radar. He and the orchestra were very happy with their relationship with Unicorn and Horenstein and wanted it to continue, which it did very fruitfully.

Many people deserve credit for the existence and the success of these two recordings but none more so than John Goldsmith, whose brainchild they were and without whose vision, personal sacrifice and courage they would never have seen the light of day. © Misha Horenstein 2024

*Misha Horenstein is a retired teacher and freelance writer. He attended many concerts and some recording sessions conducted by Jascha Horenstein and since 2014 has overseen the release of over forty of his cousin's recordings. Today Misha lives with his family in Tel Aviv, Israel.*

## Jascha Horenstein Biography

Jascha Horenstein (1898-1973) is widely regarded today as one of the most important of 20<sup>th</sup> century maestros, but during his lifetime such recognition was slow in coming. Unusually, his sterling reputation is based primarily on recordings rather than the progress of his conducting career during his lifetime. He was born in Kiev, Ukraine, moving with his family to Königsberg when he was six and later to Vienna. He studied piano with his mother, violin with Adolf Busch, music theory with Joseph Marx, and composition with Franz Shreker. He spent three years as assistant to the prominent choral conductor Siegfried Ochs, founder of the Berlin Philharmonic Choir and collaborator of Nikisch and Mahler. Ochs said that Horenstein was "one of the few conductors who really understood something about vocal music." It was from Ochs that he learned the important

technique of approaching the large-scale developing traits of a composition from a psychological perspective. During his student years, he was greatly influenced by the conducting of Arthur Nikisch, Bruno Walter, Felix Weingartner and Willem Mengelberg, who was Mahler's disciple and collaborator and was key to Horenstein's understanding of Mahler. Horenstein was also mentored by Oskar Fried, another early Mahler champion. On November 10, 1922, at age 24, Horenstein made his conducting debut with the Vienna Symphony in a program that included Mahler's First Symphony, which was rarely heard at that time. Later in the 1920's he was apprenticed to Wilhelm Furtwängler, who in 1928 recommended him to become head conductor of the Düsseldorf Opera, the only regular conducting post he ever held. This position lasted until 1933 when the rise of Hitler forced him to leave for Paris. Among the composers that Horenstein knew and worked with were Stravinsky, Rachmaninoff, Berg, Schönberg, Strauss, Nielsen, Webern, Busoni, Eisler, Janacek, Shostakovich, Bartok and Weill. Starting in the 1930's, he guest-conducted major orchestras and in opera houses all over the world, making recordings for many labels. In 1940 he took U.S. citizenship but after WWII made his home in Lausanne, Switzerland. He was a masterful



Maestro Horenstein conducting  
at the recording session

conductor for a broad range of music, not just that of Mahler and Bruckner, but he has nevertheless been particularly identified with the works of these composers because of his remarkably authoritative interpretations of their works. In an interview, he said of his time working with Furtwängler: "I learned from him the importance of searching for the meaning of the music rather than being concerned with just the music itself--to emphasize the metaphysical side of a work rather than its empirical one." Horenstein's success in that regard sums up exactly why his recordings are so treasured by music lovers today. As stated by his cousin Misha Horenstein, "That quote is so revealing. Horenstein was always 'searching' for the higher meaning."

*HD TT is very grateful to Jerry Bruck and Louise Bloomfield for their important consultation and other contributions throughout the preparation of this release, as well as to Misha Horenstein for his invaluable guidance, encouragement and research. HD TT is also very grateful to Mr. Horenstein for the insightful notes that he generously provided and for other valuable assistance in the preparation of this booklet.*

*We would like to express our gratitude to Merrill Wettasinghe, the owner of Merrill Audio, for providing an additional Tape Preamp to transfer the 4-channel tapes. We used Merrill Electronics during the mastering process to ensure the highest quality sound. We appreciate Merrill's generosity and expertise in making this project a success.*

*Photo credits: p.3 © Camilla Jessel Panufnik, frps; p.14 John Goldsmith, 1970; others unknown.*



# **Gustav Mahler: Symphony No. 3 in D Minor**

## **Part One:**

**1. I. Kräftig; Entschieden [Strong; Resolute] (33:58)**

## **Part Two:**

**2. II. Tempo di Menuetto. Grazioso. [Minuet tempo; graciously] (9:15)**

**3. III. Comodo. Scherzando. Ohne Hast [Comfortably; scherzo-like; without haste] (18:33)**

**4. IV. Sehr Langsam. Misterioso [Very slow; mysteriously] (“O Mensch! Gib Acht!”) [“O Man! Pay Heed!”] (8:42)**

**5. V. Lustig im Tempo und keck im Ausdruck [Merry in tempo and bold in expression] (“Es sungen drei Engel”) [“Three angels were singing”] (4:47)**

**6. VI. Langsam. Ruhevoll. Empfundnen [Slow; peaceful; with feeling] (22:56)**

**7. Richard Strauss: Tod und Verklärung [Death and Transfiguration] (22:02)**



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