

## *Einstein on the Beach*

is an [opera](#) in four acts (framed and connected by five "knee plays" or [intermezzos](#)), composed by [Philip Glass](#) and directed by theatrical producer [Robert Wilson](#).<sup>[1]</sup> The opera eschews traditional narrative in favor of a formalist approach based on structured spaces laid out by Wilson in a series of storyboards.<sup>[2]</sup> The music was written "in the spring, summer and fall of 1975".<sup>[3]</sup> Glass recounts the collaborative process: "I put [Wilson's notebook of sketches] on the piano and composed each section like a portrait of the drawing before me. The score was begun in the spring of 1975 and completed by the following November, and those drawings were before me all the time."<sup>[4]</sup> The premiere took place on July 25, 1976, at the [Avignon Festival](#) in France. The opera contains writings by [Christopher Knowles](#), Samuel M. Johnson and [Lucinda Childs](#).<sup>[5]</sup> It is Glass's first and longest opera score, taking approximately five hours in full performance without intermission; given the length, the audience is permitted to enter and leave as desired.<sup>[5]</sup>

The work became the first in Glass's thematically related Portrait Trilogy, along with *Satyagraha* (1979), and *Akhmaten* (1983). These three operas were described by Glass as portraits of people whose personal vision transformed the thinking of their times through the power of ideas rather than by military force.<sup>[5]</sup>

### Synopsis

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From the beginning of Glass and Wilson's collaboration, they insisted on portraying the icon purely as a historical figure, in the absence of a storyline attached to his image. While they did incorporate symbols from Einstein's life within the opera's scenery, characters, and music, they intentionally chose not to give the opera a specific plot.<sup>[22]</sup> This is in accord with Wilson's formalist approach, which he asserts creates more truth on stage than naturalist theater. Wilson structured *Einstein on the Beach* as a repeating sequence of three different kinds of space. Between major acts are shorter entr'actes known as "knee plays," a signature technique that Wilson has applied throughout his oeuvre.<sup>[23]</sup> Propelling idea of "non-plot" within *Einstein on the Beach*, its [libretto](#) employs [solfège](#) syllables, numbers, and short sections of poetry. In an interview, Glass comments that he originally intended for his audience to construct personal connections with Einstein as a character and with the music that he assigns to the icon.<sup>[1]</sup> For example, the music within the first of the opera's "Knee Plays" features repeated numbers accompanied by an [electric organ](#). Glass states that these numbers and solfège syllables were used as placeholders for texts by the singers to memorize their parts, and were kept instead of replacing them with texts.<sup>[1]</sup> This numerical repetition, however, offers an interpretation as a reference to the mathematical and scientific breakthroughs made by Einstein himself. Of further reference to the icon's image, everything on the originally staged set of *Einstein on the Beach*, from costumes to lighting, depicts specific aspects that refer to Einstein's life.<sup>[24]</sup>

Overall, the music assigned to *Einstein* demonstrates a circular process, a repeating cycle that constantly delays resolution. This process uses both additive and subtractive formulas. The three main scenes within the opera—"Train", "Trial", and "Field/Spaceship"—allude to Einstein's hypotheses about his theory of relativity and his unified field theory.<sup>[24]</sup> Specifically, themes within the opera allude to nuclear weapons, science, and [AM radio](#).

The opera consists of nine connected 20-minute scenes in four acts separated by "Knee Plays". Five "Knee Plays" frame the opera's structure and appear in between acts, while also functioning as the opening and closing scenes. Glass defines a "Knee Play" as an interlude between acts and as "the 'knee' referring to the joining function that humans' anatomical knees perform".<sup>[1]</sup> While the "Knee Plays" helped to create the necessary time to change the scenery of Wilson's seven sets, these interludes also served a musical function. David Cunningham, a

Glass scholar, writes that the intermittence of Glass's "Knee Plays" amongst the opera's four acts, serves as a "constant motif in the whole work".<sup>[24]</sup>

The opera requires a cast of two female, one male, and one male child in speaking roles (for the Wilson production); a 16-person **SATB** chamber chorus with an outstanding soprano soloist and a smaller tenor solo part; three **reed players**: **flute** (doubling **piccolo** and **bass clarinet**), **soprano saxophone** (doubling flute), **tenor saxophone** (doubling **alto saxophone**); solo violin, and two synthesizers/electronic organs.<sup>[5]</sup> The orchestration was originally tailored to the five members of the Philip Glass Ensemble, plus the solo **violin**.

## Structure

The work is structured as follows:<sup>[1]</sup>

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- Prologue (solo electric organ)
- Knee Play 1 (electric organ, SATB chorus)
- **Act 1**
  - Scene 1 – Train (piccolo, soprano and tenor saxophones, solo soprano and alto voices, SATB chorus, two electric organs)
  - Scene 2 – Trial
    - Entrance (three flutes, soprano and alto chorus, electric organ)
    - "Mr. Bojangles" (solo violin, bass clarinet, SATB chorus, electric organ)
    - "Paris"/"All Men Are Equal" (solo electric organ)
- Knee Play 2 (solo violin)
- **Act 2**
  - Scene 1 – Dance 1 (piccolo, soprano and alto saxophones, solo soprano and alto voices, two electric organs)
  - Scene 2 – Night Train (solo soprano and tenor voices, bass clarinet, SATB chorus, electric organ)
- Knee Play 3 (SATB chorus a cappella)
- **Act 3**
  - Scene 1 – Trial/Prison
    - "Prematurely Air-Conditioned Supermarket" (SATB chorus, electric organ)
    - Ensemble (three flutes, two electric organs)
    - "I Feel the Earth Move" (soprano saxophone, bass clarinet)
  - Scene 2 – Dance 2 (solo violin, solo soprano, SATB chorus, electric organ)
- Knee Play 4 (solo violin, tenor and bass chorus)
- **Act 4**
  - Scene 1 – Building (two electric organs, improvisatory woodwinds, chorus and solo tenor saxophone)
  - Scene 2 – Bed
    - **Cadenza** (solo electric organ)
    - Prelude (solo electric organ)
    - Aria (solo soprano, electric organ)
  - Scene 3 – Spaceship (flute, tenor saxophone, bass clarinet, solo violin, solo soprano voice, SATB chorus, two electric organs)
- Knee Play 5 (solo violin, soprano and alto chorus, electric organ)