

**2009** “Human musicians routinely jam with cybernetic musicians.”

**2019** “Virtual artists in all of the arts are emerging and are taken seriously.”

**2029** “Many of the leading artists are machines.”

**2099** “The reverse engineering of the human brain appears to be complete.”

Ray Kurzweil, *The Age of Spiritual Machines* (1999).


George Papadopoulos and Geraint Wiggins, “AI Methods for Algorithmic Composition: A Survey, a Critical View and Future Prospects”, *AISB Symposium*, 1999.

- Mathematical models
- Knowledge based systems
- Grammars
- Evolutionary methods
- Systems which learn
- Hybrid systems

Gerhard Nierhaus

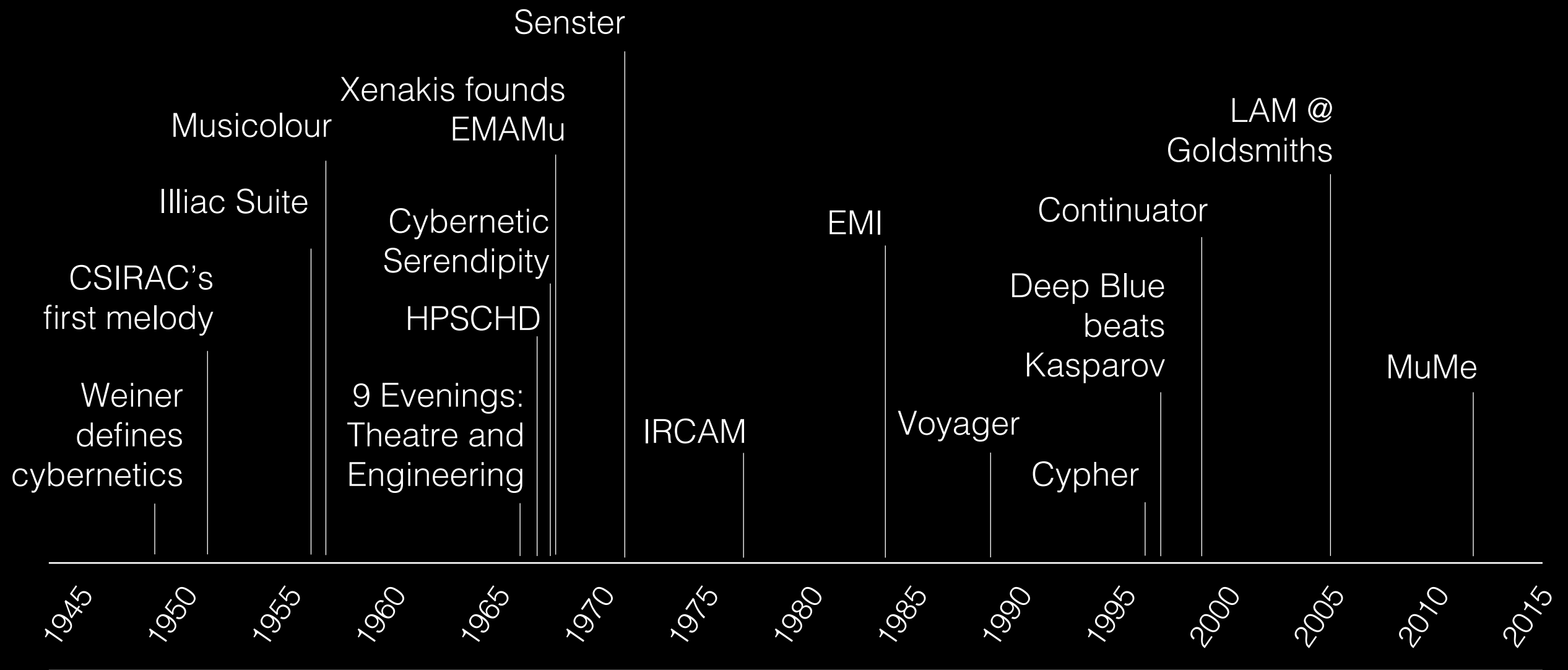
# Algorithmic Composition

Paradigms of Automated  
Music Generation

 SpringerWien NewYork







← Electronics      ← Computation      ← Personal Computation      ← Big Data...





# The Gartner Hypecycle

