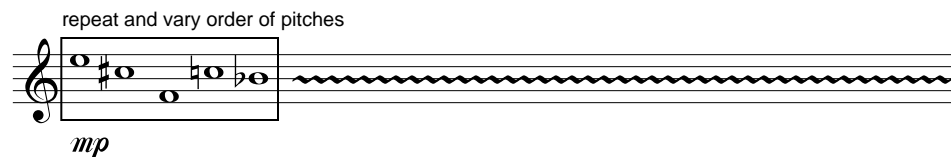


Aleatoric Music (Indeterminacy)

Aleatoric music involves the deliberate use of chance or indeterminacy in either the performance or the actual compositional process of a musical work. If chance is involved in the composition process, such random processes as throwing dice, picking a number out of a hat, or even computer generated random numbers may be used to form compositional decisions. If the chance aspect of the piece is somehow left up to the performer, specific details of a work's compositional structure are formed by the decisions made by the performer. The piece, therefore, would become an improvisation, and may be strikingly different each time it is performed.

Types of aleatoric music:

- (1) Precompositional, random operations, such as throwing dice, are used to obtain compositional decisions. In *Music of Changes*, John Cage tossed coins and used the results to choose configurations from the *I Ching*, a Chinese book of oracles. Musical parameters were then chosen based on these configurations.
- (2) Leave certain decisions up to the performer.
 - (a) Improvisation box. Certain musical elements are given to the performer which are then improvised.



- (b) The performer determines the order of a work's sections. Stockhausen's *Klavierstücke XI* contains nineteen blocks or sections of music. They are to be played in any order beginning with the section the performer sees first. The work continues until one of the nineteen sections is played three times.
- (c) Graphic score. Peter Tod Lewis's *Alcázar III* takes the form of a maze. As the performers try to find the path to the center of the maze they come across pitches which they softly play on their instrument. Other works are void of any type of musical directions and are entirely graphical.
- (d) Completely verbal scores. Verbal directions (no music) are given to the performer. Ex.: Cage's *Variations IV*.