medieval music was communicated by notation. It is a repertory generally assumed to have been conceived and disseminated<sup>5</sup> in writing, not *ad hoc*<sup>6</sup> performance.

We know that Notre-Dame was transmitted, but this does not mean it circulated without significant variation. Anon IV reports that Perotinus 'revised' Leoninus's *liber*, and suggests that other musicians also left their marks. Among the organa, there are alternative polyphonic realisations of the same plainchant, or often once section was replaced by a different clausula in another source. The 'same' polyphonic line may appear in different notations or systems of notation, suggesting different rhythms or a different approach to it. Intonations and cadential gestures may differ from source to source.

## Ligatures

In music notation, a ligature is a graphic symbol representing two or more notes performed in a single gesture, and on a single syllable, primarily in use ca. 800–1650 AD. They are characteristic of neumatic<sup>7</sup> (chant) and mensural notation<sup>8 9</sup>.

All ligatures of this period have the following principles in common:

- All ligature notes are either the length of a longa ("L"), a breve ("B"), or a semibreve ("S").
- All ligatures have at least two notes.
- For ease of discussion, ligatores of different length chave different names. A ligature with two notes is called a binaria; one with hree lotes, a ternaria; one with four notes, a dustentaria; and one with f@notes, a quinaria. Larger ones are possible, note at
- If a ligature has three or more notes, all notes in the middle (the mediae) are B.
- A downward tail changes the value of the note where the tail occurs, either from L to B or, less commonly, from B to L.
- An upward tail indicates that the next two notes are to be a series of S.
- Tails at the end of a ligature would indicate an additional note be sung or played, called a plica, that was not part of the ligature. This was especially common with the rhythmic modes to accommodate in practice what could not be accomplished within the very strict theoretical basis for modal music.

<sup>9</sup> *Mensural music* - In the 13-16th cents. the contrast to plainsong (*musica plana*). Polyphonic, every note has a strictly determined value, distinct from free rhythm of Gregorian chant.





<sup>&</sup>lt;sup>5</sup> To spread (especially information) widely.

 $<sup>^{\</sup>rm 6}$  Created or done for a particular purpose as necessary.

<sup>&</sup>lt;sup>7</sup> Neumatic - A style of plainchant that sets one syllable of text to one neume. A neume is a symbol that denotes two to four notes in the same symbol

<sup>&</sup>lt;sup>8</sup> *Mensural notation* - System of nation est. c.1250 by Franco of Cologne and used until 1600. All shapes of notes and pauses had definite time values, in contrast with modal notation where ligatures was required. The basis of the modern system.