

# Notation Manual

by Ross W. Duffin

based on the Notation Manual in

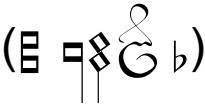
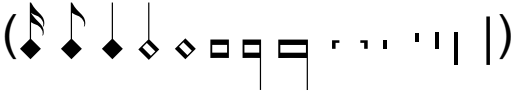



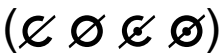
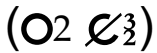

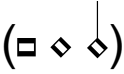

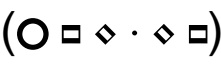

Guillaume Dufay – Chansons





Forty-five settings in original notation from Oxford, Bodleian Library MS Canonici 213

Edited by Ross W. Duffin, Ogni Sorte Editions, © 1983.

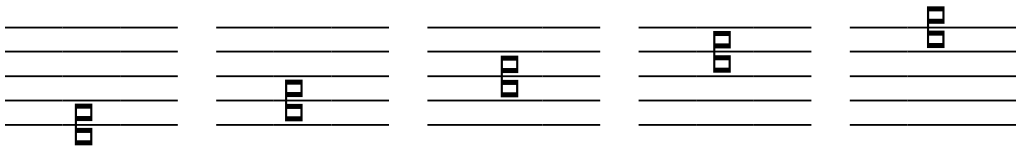
This version (© 2000) uses the font Squarcialupi

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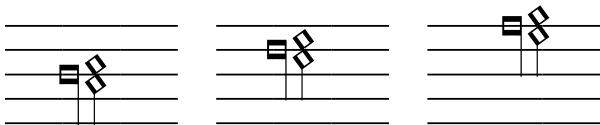
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Clefs are signs showing the pitch of the notes on the staff. They are usually based on C () or F (, ), although the G clef () begins to appear more frequently in the later 15<sup>th</sup> century. Within a piece, clefs may change at the beginning of a new line of music or even within a line if the range of the part suddenly shifts.

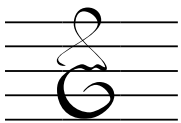
Placements of middle C:



Typical placements of the F below middle C:


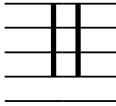
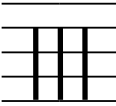
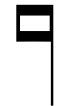
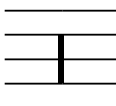
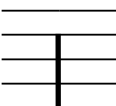

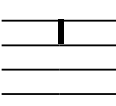

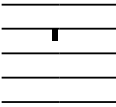

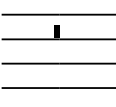


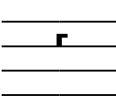

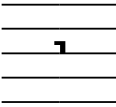

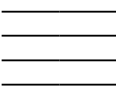


Typical placement of the G above middle C:



Flat signatures, as in the example below, apply to the notes on which they sit, not to those an octave above or below. They may change in the middle of a piece.

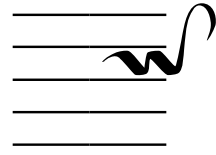


	maxima	 or 
	longa	 or 
	brevis	
	semibrevis	
	minima	
 or 	semiminima	
	fusa	
	semifusa	

N.B. Englished names are often used (e.g., long, breve, minim). The long occasionally appears at the end of a piece or section and seems to function there simply as a long note of indefinite value (like a modern fermata). The two smallest values (both notes and rests) are rare in the 15<sup>th</sup> century. Rests can occur on any line.

## Custos

"guardian" (from the same root as our English word "custodian"): appears at the end of a line and indicates the first pitch of the next.



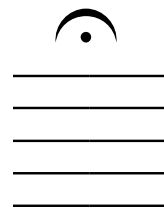
## Sign of Congruence

indicates where the parts "come together" at the ends of sections, and sometimes where fuga parts enter and end.



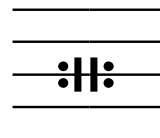
## Corona

functions like a modern fermata at section endings. Otherwise, it is taken to indicate homophony.

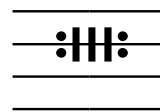


## Repeat Sign

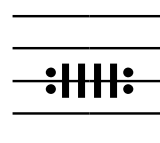
indicates that the music of the preceding section is to be performed once for each line between the dots.



(Repeat once)



(Repeat twice)











(Repeat 3 times)



Ligatures are two or more notes written in a kind of notational shorthand. They are also thought to indicate syllable divisions in texted parts. Note that the oblique shape represents only the two notes at its extremities.



## Rules for Ligature Interpretation





1. An upward stem on the left of a ligature makes the first two notes semibreves
 





	or		=	
			=	
  
2. A downward stem on the left of a ligature makes the first note a breve
 





	=	
---	---	---
  
3. A downward stem anywhere after the beginning of the ligature makes the preceding note a long
 





	=	
--	---	--
  
4. All middle notes are breves if there are no interior stems (see No. 3)
 

	=	
---	---	---
  
5. An oblique note:
 

	=	
		
  
6. A square initial note is:
 

	=	
	=	
  
7. A square final note is:
 

	=	
	=	

**N.B.**  =   
 = 

Just as a whole rest in modern notation can have different durations depending on the time signature, so many of the notes and rests of this earlier notation can have different durations depending on the mensuration. There are no barlines to mark each measure nor to distinguish one mensuration from another, but the rhythmic organization is there just the same.

In order to find this organization in situations where no mensuration sign is given, two questions must be answered: 1. Does the breve contain two semibreves or three? 2. Does the semibreve contain two minims or three?

The first question refers to what is known as the **tempus**, i.e., the breve-semibreve relationship. If the breve contains 3 semibreves, the tempus is said to be perfect and it is indicated by a mensuration sign in the form of a perfect (complete) circle: **⊙**. If the breve contains only 2 semibreves, the tempus is said to be imperfect, and it is indicated by a mensuration sign in the form of an imperfect (incomplete) circle: **⊖**.

The second question refers to what is known as **prolatio** (or **prolation**), i.e., the semibreve-minim relationship. If the semibreve contains 3 minims, the prolation is said to be perfect or major, and it is indicated by a dot in the middle of the mensuration sign: **⊙** or **⊖**. If the semibreve contains only 2 minims, the prolation is said to be imperfect or minor, and it is indicated by the absence of a dot in the middle of the mensuration sign: **⊙** or **⊖**.

Thus, for example, **⊙** indicates a mensuration of perfect tempus and imperfect prolation (*tempus perfectum, prolatio minor*), and **⊖** indicates a mensuration of imperfect tempus and perfect prolation (*tempus imperfectum, prolatio maior*). The chart below illustrates tempus and prolation for each of the four basic mensurations. It should be noted that minims are equivalent in all of these mensurations, i.e., a minim in one mensuration has the same duration as a minim in any other, as long as one of the mensurations is not diminished or augmented.

Tempus		Prolation	
<b>⊖</b>	□ = ◇ ◇ <b>imperfect</b>	◇ =	◇ ◇ <b>imperfect</b>
<b>⊖</b>	□ = ◇ ◇ <b>imperfect</b>	◇ =	◇ ◇ ◇ <b>perfect</b>
<b>⊙</b>	□ = ◇ ◇ ◇ <b>perfect</b>	◇ =	◇ ◇ <b>imperfect</b>
<b>⊙</b>	□ = ◇ ◇ ◇ <b>perfect</b>	◇ =	◇ ◇ ◇ <b>perfect</b>

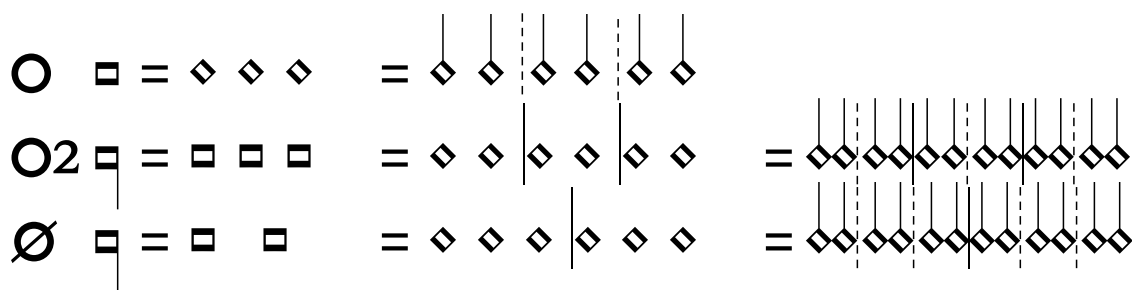
The term diminution refers to the halving or otherwise shortening of the values of the notes, and it is indicated either by a line drawn through the mensuration sign (∅) or by a cipher (e.g., O2, for which, see Proportion).

Theorists of the period and modern writers both disagree over whether the line through the mensuration sign called for a speeding up of the notes to twice their normal speed or to some lesser amount. This is primarily a performance practice concern (in consecutive usage) rather than a notational one, however, since almost all simultaneous instances of diminution with integer valor (undiminished) mensurations in the early 15<sup>th</sup> century call for a doubling of the speed, as follows:

### Diminution Chart

C	□ = ◇ ◇	= ◇ ◇   ◇ ◇	
∅	□ = □ □	= ◇ ◇   ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇
O	□ = ◇ ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇	
∅	□ = □ □	= ◇ ◇   ◇ ◇   ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇
C	□ = ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇	
∅	□ = □ □	= ◇ ◇   ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇
O	□ = ◇ ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇	
∅	□ = □ □	= ◇ ◇   ◇ ◇   ◇ ◇	= ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇   ◇ ◇

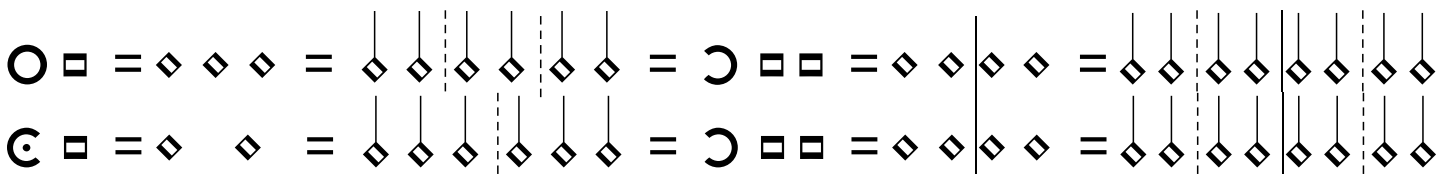
Proportion refers to the use of numerical signs to indicate a change in the speed of the notes from integer valor. The most common of these is 2, as in **O2** or **C2**, both of which call for a doubling of the speed of the notes. That is, 2 represents  $\frac{2}{1}$  (*proportio dupla*). (In all cases, the upper value replaces the lower value from the preceding section.) Since **O2** would then seem to cause the notes to move at the same speed as  $\emptyset$ , a comparison of the contrasting organizations of the two is shown here:



As can be seen, **O2** causes three imperfect semibreves of **O** to be replaced by three imperfect breves of **O2**, whereas  $\emptyset$  causes a perfect breve of **O** to be replaced by two perfect breves of  $\emptyset$ .

Most proportions are straightforward (even complex ones like  $\frac{9}{8}$  are at least specific) but 3 is sometimes confusing since it is used by itself to represent both  $\frac{3}{2}$  and  $\frac{3}{1}$ . In general, 3 in the early 15<sup>th</sup> century means  $\frac{3}{2}$  (*sesquialtera*) and in the later 15<sup>th</sup> century it tends to mean  $\frac{3}{1}$  (*proportio tripla*). Eventually, however, **C3** (meaning  $\frac{3}{2}$ ) emerges as the standard triple mensuration.

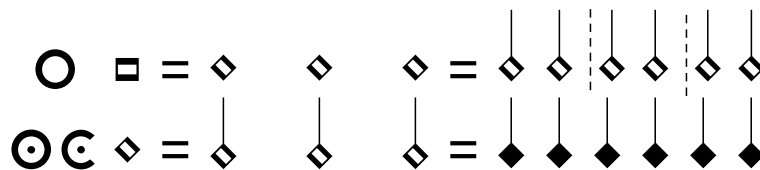
One other special proportion case is the sign **C** which is equivalent to the numerical proportion  $\frac{4}{3}$  at the semibreve level in **O** and  $\emptyset$ , and on the minim level in **C**:





Augmentation may be indicated by a numerical proportion sign such as  $\frac{2}{3}$ , where the lower value is greater than the upper (in this example, two notes replace three of the same value from the previous section), thus slowing the speed of the notes. This is normally reserved for cancellation of previous proportions, however.

A more typical use of augmentation occurs after around 1480, where the signs  $\odot$  and especially  $\textcircled{C}$  are used simultaneously with other mensurations to indicate a slowing of the notes to the next level, as follows:



This kind of augmentation is typically used for cantus firmus statements in masses and motets.

In mensurations where notes are grouped in threes, i.e., those in which either tempus or prolation or both are perfect, imperfection or alteration may apply. Imperfection usually means making a note that is potentially worth three of the next lower value worth only two.

### Rules for Imperfection

1. A note is perfect before another note or rest of the same kind.
2. A note is perfect if followed by two or three (or multiples of three) of the next lower value. Thus, for example,  $\bigcirc \square \diamond \diamond \square$  or  $\bigcirc \square \diamond \diamond \diamond \square$  makes the first  $\square$  perfect.
3. A note is imperfected if followed or preceded by one or by more than three of the next lower value. Thus,  $\bigcirc \diamond \diamond \square$ ,  $\bigcirc \diamond \diamond \square$ , or  $\bigcirc \diamond \diamond \diamond \diamond \square$  makes the  $\diamond$  imperfect.
4. Where imperfection by both a following note and a preceding note is possible, the former takes precedence. Thus, for example,  $\bigcirc \square \diamond \square \square$  makes the first  $\square$  imperfect.
5. Rests cannot be imperfected, but they can cause imperfection of a note.

In addition, notes can sometimes be imperfected by values smaller than the next lower one, most frequently as a  $\square$  by a  $\diamond$  in  $\text{C}$  and  $\text{O}$ , or a  $\square$  by a  $\diamond$  in  $\text{O}$ , sometimes imperfected a note on more than one level:  $\text{O} \diamond \square \diamond = \text{O} \diamond \square \diamond$  (in 2:1 reduction)

In mensurations where notes are grouped in threes, i.e., those in which either tempus or prolation or both are perfect, imperfection or alteration may apply. Alteration means doubling the value of a certain note in order to complete the triple grouping (perfection) of the mensuration.

### Rules for Alteration

1. When two semibreves ( $\diamond \diamond$  or  $\square \square$ ) are placed between two breves (or perfections) in perfect tempus, the value of the second semibreve is doubled:

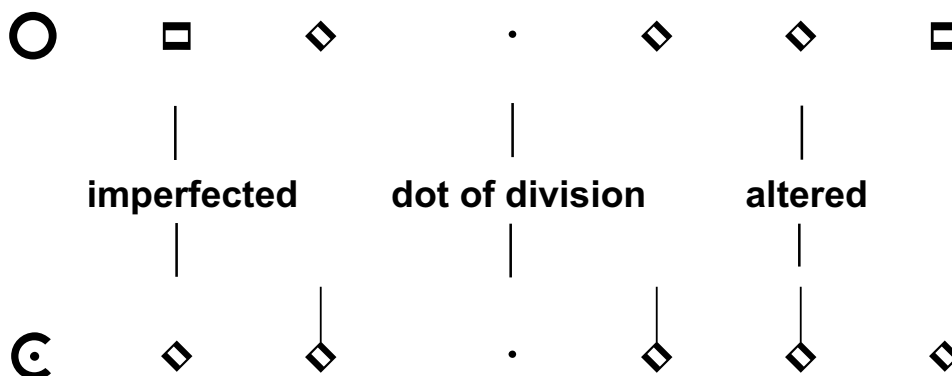
$$\begin{array}{c} \diamond \diamond \quad = \quad \text{the time of} \quad \diamond \diamond \diamond \\ \parallel \parallel \\ \diamond \diamond \diamond \\ \quad \quad \quad \smile \end{array}$$

2. When two minims are placed between two semibreves (or perfections) in perfect prolation, the value of the second minim is doubled:

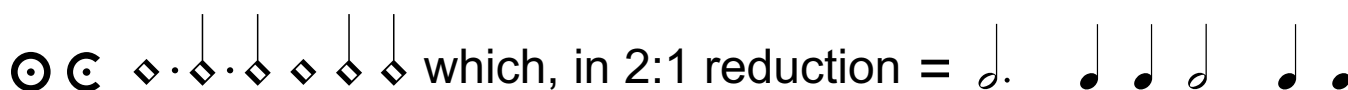
$$\begin{array}{c} \diamond \diamond \quad = \quad \text{the time of} \quad \diamond \diamond \diamond \\ \parallel \parallel \\ \diamond \diamond \diamond \\ \quad \quad \quad \smile \end{array}$$

The familiar dot of addition (that which adds one-half again to the value of the note it follows) occurs frequently. However, another type of dot occurs, too: one that is identical in appearance to the dot of addition but different in function.

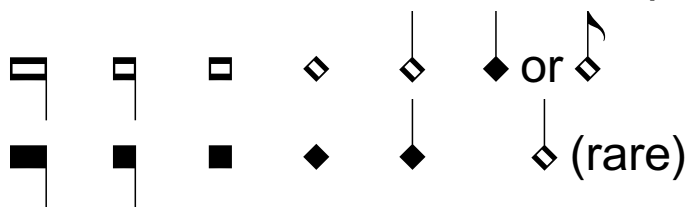
This so-called dot of division is used to separate perfections. Functioning therefore almost like a modern barline, it helps to make clear where imperfection and alteration should apply in mensurations that have some triple organization. (It is often a sign of impending alteration.) Thus, the dot of division does not necessarily change the duration of the note preceding it. It is usually distinguished by its placement between notes of equal value (sometimes between the stems of minims) or on either side of rests. An example of its use and effect is seen here:



This kind of dot can also be used to create artificial alteration or imperfection. In so doing, it creates displacement from the prevailing mensuration and is known as a *punctus syncopationis*, as in this example:



Coloration is indicated by the blackening of the notes (originally the reddening or voiding of black notation) and is usually taken to mean that each note loses one third of its value (but see below). Notes in coloration are always imperfect; rests within a passage in coloration are affected like notes of the same value. The normal notes of white mensural notation with their corresponding blackened forms are:



The minim in coloration ( $\blacklozenge$ ) is identical to one of the forms of the normal semiminim and this creates some potential confusion. The intended form is often clear from the context ( $\blacklozenge\blacklozenge\blacklozenge$  indicating coloration or  $\blacklozenge\blacklozenge$  indicating semiminims).

There are really two kinds of coloration. **Triplet coloration** occurs when two normally imperfect notes are replaced by three blackened notes, as  $\text{C } \square\square = \blacksquare\blacksquare\blacksquare$ ,  $\text{C } \diamond\diamond = \blacklozenge\blacklozenge\blacklozenge$ , or  $\text{C } \downarrow\downarrow = \blacklozenge\blacklozenge\blacklozenge$ . **Hemiola coloration** occurs when two normally perfect notes are replaced by three blackened (imperfect) notes, as  $\text{O } \square\cdot\square\cdot = \blacksquare\blacksquare\blacksquare$  or  $\text{C } \diamond\cdot\diamond\cdot = \blacklozenge\blacklozenge\blacklozenge$ . In  $\text{O}$ ,  $\square\cdot = \diamond\diamond\diamond$  and  $\blacksquare = \blacklozenge\blacklozenge$ , so, ironically,  $\diamond = \blacklozenge$  and  $\downarrow = \blacklozenge$ . By the same token,  $\downarrow = \blacklozenge$  in  $\text{C}$ . Thus, the smaller notes do not lose one third of their value but, rather, produce a hemiola-like change of accent.

Two other types of coloration are the so-called **half coloration**, as in  $\square\blacksquare$  or  $\square\blacklozenge$ , where only the note that belongs to the colored part of the ligature is affected, and the so-called **minor color**, where  $\blacklozenge\blacklozenge = \blacklozenge\blacklozenge$  in the later 15<sup>th</sup> century.