

# Chapter 2

## Reading the Staff and Picking Pitches

Now it is evident that the human soul is moved in various ways according to various melodies of sound, as the Philosopher states (*Polit.* viii, 5), and also Boethius (*De Musica*, prologue). Hence the use of music in the divine praises is a salutary institution, that the souls of the faint-hearted may be the more incited to devotion. Wherefore Augustine says (*Confess.* x, 33): “I am inclined to approve of the usage of singing in the church, that so by the delight of the ears the faint-hearted may rise to the feeling of devotion”: and he says of himself (*Confess.* ix, 6): “I wept in Thy hymns and canticles, touched to the quick by the voices of Thy sweet-attuned Church.”

—Saint Thomas Aquinas, *Summa Theologiae*, II-II, q. 91, art. 2

### 2.1 Solfege

As most are familiar with the show tune “Do-Re-Mi” ([Part 1](#) and [Part 2](#)) from the 1959 Rodgers and Hammerstein musical *The Sound of Music*, it will serve as a good warm up.

Do, a deer, a female deer

Re, a drop of golden sun

Mi, a name I call myself

Fa, a long, long way to run

So, a needle pulling thread

La, a note to follow So

Ti, a drink with jam and bread

That will bring us back to Do

So, Do, La, Fa, Mi, Do, Re

So, Do, La, Ti, Do, Re, Do

When you know the notes to sing

You can sing most anything

The precedent for learning the scale this way was set nearly 1000 years prior by the Benedictine monk Guido d'Arezzo. He used the established hymn *Ut queant laxis* from the Office of St. John the Baptist, composed 400 years prior by fellow Benedictine Paul the Deacon, to teach his students relative pitch, serving also as the basis for notating chant.

Hymn. 2.  
**U** T que- ant la-xis re-soná-re fibris Mi- ra ge-stó-rum fámu-li tu-ó-rum, Sol- ve  
 pollú-ti lá-bi- i re- á-tum, Sancte Jo- ánnes.

- DO changed from *Ut*
- RE from *resonáre*
- MI from *Mira*
- FA from *fámuli*
- SOL from *Solve*
- LA from *lábi*
- TI from SI, the first letters of *Sancte Joánnes*

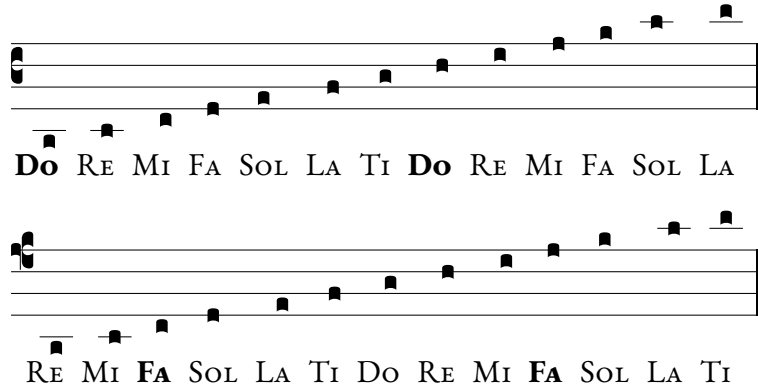
## 2.2 The Staff and Clefs

Chant is notated on a four-line staff with the notes being placed either on the lines or spaces. Pitches go from low to high as you travel up the staff vertically. A clef on the beginning of any staff denotes the relative intervals between the notes. There are two kinds of clefs: the DO clef looks like a “C” and shows on which line DO is located, and the FA clef looks like a fancy “F” and shows on which line FA is located.

LA TI **Do** RE MI FA SOL LA TI **Do** RE MI FA

**FA** SOL LA TI DO RE MI **FA** SOL LA TI DO RE

The two clefs are shown above in their typical positions. Without additional markings, there will always be a half-step (or semi-tone) between MI–FA and TI–DO while all the other adjacent intervals are whole steps. The clefs can be placed on different lines of the staff and relative intervals move along with it.



### 2.3 “Movable” Do

Chant operates on what’s called “Movable” Do, but that’s not referring to placing the clef on different lines as was shown above. It means that you are free to assign any pitch to DO (or FA) and all that changes is what key you’re singing in. The position of the whole steps and half-steps remain the same. This makes transposing to adjust the range very easy. The two tables below shows how the pitches in the scale change for different assignments of DO, with each column being its own scale.

<b>Do</b>	A	A#   Bb	B	C	C#   Db	D
TI	G#   Ab	A	A#   Bb	B	C	C#   Db
(TE)	G	G#   Ab	A	A#   Bb	B	C
LA	F#   Gb	G	G#   Ab	A	A#   Bb	B
	-	-	-	-	-	-
SOL	E	F	F#   Gb	G	G#   Ab	A
	-	-	-	-	-	-
<b>FA</b>	D	D#   Eb	E	F	F#   Gb	G
MI	C#   Db	D	D#   Eb	E	F	F#   Gb
	-	-	-	-	-	-
RE	B	C	C#   Db	D	D#   Eb	E
	-	-	-	-	-	-
<b>Do</b>	A	A#   Bb	B	C	C#   Db	D

<b>Do</b>	D#   Eb	E	F	F#   Gb	G	G#   Ab
Ti	D	D#   Eb	E	F	F#   Gb	G
(Te)	C#   Db	D	D#   Eb	E	F	F#   Gb
La	C	C#   Db	D	D#   Eb	E	F
-	-	-	-	-	-	-
SoL	A#   Bb	B	C	C#   Db	D	D#   Eb
-	-	-	-	-	-	-
<b>FA</b>	G#   Ab	A	A#   Bb	B	C	C#   Db
MI	G	G#   Ab	A	A#   Bb	B	C
-	-	-	-	-	-	-
RE	F	F#   Gb	G	G#   Ab	A	A#   Bb
-	-	-	-	-	-	-
<b>Do</b>	D#   Eb	E	F	F#   Gb	G	G#   Ab

Sometimes, the selected pitch for Do corresponds to the key for the piece (for example, if Do is A, then the chant is in the key of A-major). However, this is not a hard and fast rule as the Modes and the accidental muddy the water, so always consult your personal music theorist for an accurate diagnosis.

## 2.4 Counting, Bars and *Custos*

Unlike other forms of music, chant is primarily concerned with the words and secondarily about the melody. This is the main reason why there is no time signature in chant as is present in modern notation.

The words of the chant are broken up into syllables and these syllables have various groups of neums applied to them (composed of at least one note to 48 or more!). The chant as a whole is divided up into different phrases each separated by a bar. The kind of bar used dictates how the flow of the singing is broken up.

To study these concepts further, let's look at the Offertory for the 2<sup>nd</sup> Sunday after Epiphany.

Offert.  
1.

Úbi-lá-te \* De-o u-ni-vér-sa ter-ra: ju-bi-lá-

te De-o u-ni-vér-sa ter-

ra: psalmum dí-ci-te nó-mi-ni e-jus: ve-ní-te, et

audí-te, et nar-rábo vo-bis, o-mnes qui ti-mé-tis De-um, quanta



As discussed in the first lesson, each note has a count of “one” unless there is an indication that it should be expressed or held for longer. Breaking up the syllables of the first two words we see:

- **Ju** has a *punctum* and gets one count
- **bi** has a *punctum* and gets one count
- **la** has a *salicus* and gets three counts, with the middle slightly lengthed
- **te** has a *punctum* and gets one count
- **De** has a *torculus* and gets three counts
- **o** has a *torculus* combined with a *clivis* and gets six counts, with the last two notes getting two counts each

Chant has four kinds of bars, each communicating something particular to the singer:

1. A **quarter bar** is a little tick mark on the top line that divides one small grouping of neums from another and signifies that a short breath could be taken if absolutely necessary
2. A **half bar** is a vertical line in the middle of the staff that divides a sentence and signifies that a short breath could be taken
3. A **full bar** is a vertical line across the whole staff that comes at the end sentence and signifies a natural rest that should be taken before commencing the next phrase
4. A **double full bar** is two full bars that comes at the end of a completed section (like a verse)

The *custos*, or guide, is the little half-sized *punctum* at the end of each staff. This note is not sung, but it “guides” the reader as to what pitch the first note of the next staff will have.

## 2.5 The Accidental and Incidental

There is only one accidental in chant: a flat (b) on T̄I changing it into T̄E. What this does is transfer the half-step from T̄I–DÓ to L̄A–T̄E. The flat is quite common in chant, though Introit of the 23<sup>rd</sup> Sunday after Pentecost stands out for having occurrences of of T̄E at both ends of the octave.

Intr. 6.  
**D** I- cit Dó- mi- nus : \* Ego có- gi- to co- gi- ta- ti- ó- nes pa- cis,  
 et non affli-cti- ó- nis : invo-cá- bi- tis me, et e-go ex-áu-di- am vos :

et redú-cam capti-vi- tá-tem ve- stram de cunctis lo- cis. *Ps.* Be-ne-di-xí-sti Dómi-ne  
 terram tu- am : \* a-vertí-sti capti-vi- tá-tem Ja-cob. Gló-ri- a Patri. E u o u a e.

When the flat is marked in the main body of the chant, the TE is carried until one of the following appear:

- Another word
- A bar (even a quarter bar)
- A natural sign (♮)

An example of a natural sign occurs at the end of the *corpus* of the Gradual for the 8<sup>th</sup> Sunday after Pentecost. Within the one word *facias* is seen TE-TI-(quarter bar)-TI-TE.


Grad.  
 5.  
**E** - sto mi-hi \* in De- um pro- te- ctó- rem, et in lo- cum  
 re- fú- gi- i, ut sal- vum me fá- ci- as.

Some chants are composed in such a way where all TI notes are flattened. In order to minimize the instances of writing flats in the score, the flat symbol moves to be right next to the Do clef. Familiar chants where this occurs are both versions of *Regina Cæli Lætare* and *Ave Verum Corpus*.

**Do** RE MI FA SOL LA TE **Do** RE MI FA SOL LA

## 2.6 Bringing it All Together

Let's look at a well-known chant and put some of these elements into practice.

5.  **A** D-ó-ro te de-vó-te, la-tens Dé- i-tas, Quae sub his fi-gú-ris ve-re lá-ti-tas: Ti-bi se  
cor me- um to-tum súbji-cit, Qui- a te contémplans to-tum dé-fi-cit. 2. Vi-sus, tactus, gustus  
in te fál-li-tur, Sed audí-tu so-lo tu-to cré-di-tur: Credo quidquid di-xit De- i Fí-li- us:  
Nil hoc verbo ve-ri-tá-tis vé-ri- us. 3. In cru-ce la-té-bat so-la Dé- i-tas, At hic la-tet simul  
et humá-ni-tas: Ambo tamen cre-dens atque cónfi-tens, Pe-to quod pe-tí-vit latro paé-  
ni-tens. 4. Pla-gas, sic-ut Thomas, non intú-e-or: De-um tamen me-um te confí-te-or:  
Fac me ti-bi semper ma-gis cré-de-re, In te spem ha-bé-re, te di-lí-ge-re. 5. Ó memo-ri- á-le  
mortis Dómi-ni, Pa-nis vi-vus vi-tam praestans hómi-ni, Praesta me-ae menti de te ví-ve-re,  
Et te il-li semper dulce sá-pe-re. 6. Pi- e pel-li-cá-ne, Je-su Dómi-ne, Me immúndum munda  
tu-o sán-gui-ne, Cu-jus una stil-la sal-vum fá-ce-re To-tum mundum quit ab omni scé-le-re.  
7. Je-su, quem ve-lá-tum nunc aspí-ci-o, Oro, fi- at il-lud quod tam sí-ti-o: Ut te re-ve-lá-ta  
cernens fá-ci-e, Vi-su sim be-á-tus tu-ae gló-ri-ae. A-men.

Before attempting to sing it, let's break this chant up into its different components:

- This is a hymn, a specific type of chant which has repetitive verses
- There are seven verses, and by studying just the first we have a good idea of approaching the rest
- The bars create eight phrases per verse: it's divided in half by a full bar, in half again by half bars, and in half again by quarter bars
- Each verse could be sung with two big breaths or four normal breaths
- Each verse start and end on the same note, and this note is the lowest note
- The lowest note is a fifth below DO, which is FA
- The highest note occurs just after the middle and is a fourth above DO, which is also FA
- Thus, the range is an octave and we can easily pick where we want to sing; let's start and end on C
- Referring to the pitch table above, a FA of C corresponds to a DO of G
- TI in this scale is F#, but since there's a flat next to the DO clef it gets flattened to a TE, which is F
- We find ourselves in the C-major scale and can play this with just the white keys on the piano
- Looking at the neums, most are *punctums* with the occasional *podatus* and *clivis*, and a dotted *punctum* at the end of each phrase
- The eight phrases have a pitch pattern of ascent → descent → ascent → descent → stay high → descent → descent → stay low

Skipping the phase of plucking this on the piano, at this point we've deconstructed the chant enough to give a go at singing it.

## 2.7 Homework

With the piece above or with another chant that you're familiar with, practice singing it several times each with a different starting note. Does starting higher make it easier or harder? How about starting lower? Can you figure out your vocal range; the lowest and highest pitches you can comfortably sing?

Also, check out *Adoro Te Devote* #129 in the red hymnal. Do you notice the difference in the clef? What changes would you make in approaching the chant notated this way?