

Peter Yarensky's abc 2.2 Help File

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Peter Yarensky's abc 2.2 Help File

This help file is intended to answer many questions about abc notation. It is centered around the as yet incomplete **abc 2.2 standard** but most of it should apply to the more widely used **abc 2.1 standard**. I wrote this gradually over a period of a few years for my own use but it occurred to me others might find it useful too. Parts of it paraphrase what's in the published standard <<http://abcnotation.com/wiki/abc:standard:v2.2>>. Some of it I wrote to highlight topics not so prominent in the standard or to give illustrations of various topics. The choice of topics is strongly influenced by issues that have caused me confusion in writing out abc notation for fiddle tunes.

- ▶ I expect it will be useful as a reference, to find the answer to a question, or to learn more about a topic that is covered here.
- ▶ It is *not* intended to be used to learn abc notation.
 - ★ For that I'd recommend [How to get started with abc notation](#) on the [abc Notation Home Page](#).

abc File Structure

All abc tunes share a common structure. A tune should begin:

- ▶ %abc-2.2 (or 2.1); This is optional but it causes strict interpretation according to the abc standard which may be important if you use any abc code that's specific to a particular version.

All abc documents should have the extension `.abc` (all lower-case)

File Headers & Tune Headers

A file may have a **file header** at the top to set default values for a tune.

- ▶ It is likely to contain postscript commands to specify the layout and other

This abc help file was written by Peter Yarensky <peter@pyarensky.com>. This version is © 2018. You may download a PDF version. It may be printed, and it may be distributed as long as it is unchanged. I hope you find it useful. ~ Peter

variables.

- ▶ The header is defined by a blank line separating it from the **body** of the tune.

Each tune has a **Tune Header** with **Information Fields**. These identify the tune and describe its characteristics.

- ▶ The first two should be X & T; the last should be K.

Important Information Fields

- X: Number *[required]*
- T: Title (second title prints smaller) *[required]*
- S: Source
- C: Composer
- F: File URL
- G: Group (for categorizing tunes for sorting, etc.)
- H: History of tune; designed for multi-line entries
- O: Geographic Origin
- N: Note
- R: Rhythm (in words)
- Q: Speed of playback
- M: Meter (in numbers) — M: none or omit M field for free meter
- L: Length of default note *[required]*
- U: User defined (e.g. U: T = !trill!)
- Z: Transcription (who, and contact information)
- K: Key (must be last) *[required]*
- +: Continues lines. For example, H: followed on the next line by +: is considered a single entry

Determining Which Fields Get Printed

The Default Print Settings

By default the following fields get printed:

- T: (Title) — centered above the tune; second title under it in smaller print
- C: (Composer) — on the right just below the title
- O: (Origin) — in parentheses following Composer

- P: (Part) — If there is a Part field in the header describing the parts, each part should be printed immediately before the part starts, and the order of parts should be at the top of the tune on the left
- Q: (Tempo) — above the tune at the start of the section to which it applies
- w: (Words) & W: (Words) — under each line or under the tune respectively

Modifying the Print Settings

It is possible to (1) print additional fields, (2) suppress printing of default fields, and (3) modify how fields are printed.

Printing is modified with the `%%writefields` directive. Its form is:

```
%%writefields <list of field identifiers> [<logical>]
```

The default setting is `%%writefields TCO PQwW` which means to print each field identified, in the order listed (Title, Composer, Origin, etc.) Subsequent `%%writefields` directives *combine* with this list rather than replacing it.

- ▶ Thus `%%writefields Q false` means to suppress printing of the Q (Tempo) field, and `%%writefields N` would add the N (Notes) field to the list to be printed.

Further modifications may be made using the **font directives** and other relevant formatting directives. For example, the following causes the History field to be displayed and sets it in Georgia 14-point text.

```
%%writefields H
%%historyfont Georgia 14 % Fonts will be discussed in
more detail near the end.
```

The Body of the Tune

Pitch is described by letters; the **duration** of a note by numbers.

Pitch Notation

Here are two ways of relating pitch as described in abc notation to other standard descriptions of pitch. First, a table:

abc Notation	Description	Scientific Pitch Notation	Helmholtz Pitch Notation
C, to B,	octave below staff (G clef)	C6 to B6	c''' to b'''
C to B	octave in lower part of staff	C5 to B5	c'' to b''
c to b	octave in upper part of staff	C4 to B4	c' to b'
c' to b''	octave in the positions	C3 to B3	c to b

In abc notation, additional commas/apostrophes raise or lower pitch by an octave. Be sure to turn off smart quotes.

Accidentals: ^, = and _ before a note produce sharp, natural or flat symbols.

Another way to look at it is in terms of the keyboard:

Notating Pitch

G, A, B, C D E F G A B c d e f g a b c' d' e'

The image shows a musical staff with four measures. Above the staff, the notes G, A, B, C, D, E, F, G, A, B, c, d, e, f, g, a, b, c', d', e' are listed. The first measure contains G, A, B in 3/8 time. The second measure contains C, D, E, F, G, A, B in 7/8 time. The third measure contains c, d, e, f, g, a, b in 3/8 time. The fourth measure contains c', d', e' in 3/8 time.

Changing Meter, Key, or Default Note Length Mid-Tune

Many tunes include key changes. In a crooked tune there are mid-tune changes in meter. These can be handled by making a new line in the abc code for notating the change or by including the code within a line of music.

- ▶ **Use of a New Line.** Start a new line of abc code with a K:, M: or L: field. Then start the music on another new line.
 - ★ This would be appropriate, for example, to indicate key changes between the parts of a tune.
- ▶ **Within a line of music.** At the beginning of the measure where the change occurs, put the K:, M: or L: field in brackets.
 - ★ This would be appropriate, for example, in a crooked tune where different measures switched between 4/4 and 6/4 meter.
- ▶ To keep the printed music on same line, use \ at end of previous line of music.

An Illustration: The abc Code for the Notating Pitch Example

Here is the abc code for the *Notating Pitch* example. It illustrates (1) the structure of abc code, (2) how it corresponds to the standard musical notation, and (3) changing meter during the tune.

- ▶ The confusing array of letters, single and double quotation marks is the note name in double quotation marks for display above the staff followed by the same note name to produce the notation. Thus "C"C"D"D is "C" C "D" D.

```
X:1
T:Notating Pitch
L:1/8
M:3/8
K:C
"G,"G,"A,"A,"B,"B, |\
M:7/8 % The first method for changing meter
"C"C"D"D"E"E"F"F "G"G"A"A"B"B |\ % Below, the second method
"c"c"d"d"e"e"f"f "g"g"a"a"b"b | [M:3/8] "c'"c'"d'"d'"e'"e'|]
```

- ★ *Note:* The note names are notated by treating them as chords. Technically they should be annotations, but as such they were displayed at different heights which seemed less desirable.

Note Length, Timing, Rhythm & Rests

Note Length: The **unit note length** is the length of a note specified by a letter with no modifier. It is specified in the tune header.

- ▶ For example, L:1/8 would mean that unless otherwise specified each note would be an eighth note.
- ▶ It's generally best to choose a unit length so that most of the notes in the tune are that length or longer.

To change the note length, do one of the following.

- ▶ A number after the note is a multiplier for the length specified in L:
 - ★ e.g. for L:1/8, A2 is a quarter note; for L:1/4, A2 is a half note.
- ▶ A [/] + a number after a note divides the default duration.
 - ★ e.g. for L:1/8, A/2 is an eighth note; for L:1/4, A2 is an eighth note.

★ A shortcut for $A/2$ is $A/$.

If the default note length isn't specified, it is computed automatically. This may or may not be the best length, so it's best to avoid this.

- ▶ To find default note when not specified: divide meter; e.g. $2/4$ meter divides to 0.5. If the result is $<.75$, default = $1/16$; if $\geq .75$, default = $1/8$.

Dotted Rhythm: Put a $<$ or $>$ between two notes: e.g. $A2>B2 = A3B$.

Rests: Symbolized by z or x . Duration described as with regular notes.

- ▶ z = visible rest, x = invisible rest

★ Invisible rests are useful for making the playback of a tune correct.

Musical Structure: Beams, Line Breaks, Bar Lines & Repeats

Beams: Group notes without spaces between them to beam them.

Line Breaks: By default a line break occurs after each line of abc code, although that may be modified.

- ▶ \backslash = *continue* the line with what's on the next line of abc code
- ★ See *Notating Pitch* (previous page) for an example.

Bar Line & Repeat Symbols: The following is adapted from the abc 2.2 standard.

- | bar line
-] thin-thick double bar line
- || thin-thin double bar line
- [| thick-thin double bar line
- |: start of repeated section
- :| end of repeated section
- :: start & end of two repeated sections

- ▶ **First And Second Repeats:** begin the measure with [1 or [2.
 - ★ If adjacent to bar lines, just |1 or |2 with no spaces.
 - ★ Thus, the following is correct: |1 <notes> :|2 <notes> |]
 - ★ Whereas the following is not: | 1 <notes> :| 2 <notes> |]

Parts Notation: Handling Variant Orders of Parts, Repeats and Endings

Unusual or complex orders of parts, repeats and endings may be handled using the P: (Parts) field. It may be used in the **Tune Header** and again in the **Tune Body**. The use of Parts notation tells both the reader and the abc software the correct sequence for playing the tune.

- ▶ **Order of Parts.** This is handled in two ways.
 - ★ Order is specified in the tune header. For example, for *Chorus Jig*:
 P: ABCB % *Play parts in the order ABCB*
 - ★ In the body of the tune, parts may be identified when useful or even necessary. For example:
 P: C % *Identifies the beginning of the C part*
- ▶ **Repeats.** Complex repeats are much easier to set up and display using Parts notation in the Tune Header. This is done through a combination of numbers and parentheses.
 - ★ **Numbers** following a Part letter: number of repeats of that part.
 - ★ **Parentheses** are used to repeat entire sequences of parts. Parentheses may be nested for more complex sequences.
 - ★ **Dots** may be inserted anywhere in a header P: field to improve legibility; they have no other function.
 - ★ **Some Examples:**
 T: La belle Catherine
 P: A3B2.A3C2
 % *Play the A part 3X, the B part 2X, then the A part again 3X, and the C part 2X*

T: Les cinq jumelles

P: (A.B)2.C.D2.E2

% Play A, then B, then repeat A & B and do C, and finally two each of D & E parts

And suppose we had to play *Les cinq jumelles* seven times through for a square dance. Then the P: field would look like this:

P: ((A.B)2.C.D2.E2)7

► **Endings.** Parts notation may be used in both the Tune Header and Tune Body to set up very flexible patterns of endings.

★ Suppose a tune has four repeats each of the A part and B part. We can set up a variety of possible endings for each part. The Tune Header would be
P: A4B4

★ In the Tune Body we would specify the relevant **repeat pattern**. Here are a couple examples for the B part.

★ **Different ending with each repeat:**

P:A *% (at the beginning of the A part)*

<A-part notes> | [1 <first ending> :| [2 <second ending> :| [3\
<3rd ending> :| [4 <4th ending> |]

★ **Different ending for odd, even repetitions:**

P:A

<A-part notes> | [1,3 <notes> :| [2 <Notes> :| [4 <Same Notes> |]
*% Endings 2 & 4 are separate to get the correct
% ending symbols for each.*

★ Here are a couple other possibilities for specifying repeats:

[1-3 <notes> :| [4 <notes> |]

For 8 repetitions: [1,3,5-6 <notes> :| [2,4,7 <notes> :| [8 <notes> |]

Modifying Notes: Ties & Slurs, Grace Notes & Triplets

Here are several ways of modifying how we play notes.

Ties & Slurs

- ▶ **Ties:** 2 notes of the *same* pitch may be tied (within/across bar): “-” between notes
 - ★ The tie must be adjacent to the first note.
- ▶ **Slurs:** Connect two or more *different* notes (within/across bar): put () around notes
 - ★ Spaces within parentheses are OK between notes but not next to the parentheses sign.

Grace Notes: Use {} symbols around grace notes; no parentheses are needed for slurs.

Triplets: Use (3 followed by the notes of the triplet. To slur, put additional () around whole triplet. Thus:

Without slurs: (3def) or with slurs: ((3def))

Accents, Decorations, Redefinable Symbols & Special Characters

Here are some commonly used accents and decorations. See the **abc 2.2 Standard** section 4.14 for many more.

P	Uppermordent (e.g. for an “a” note, Pa would be played aba)
T	Trill
.	Stacatto (period)
u	Upbow
v	Downbow
!0!-!5!	Fingerings
!+!	Left-hand Pizzicato
!slide!	Slide up to a note

Redefinable Symbols. The letters H–W and h–w, and the symbol ~ may be assigned as shortcuts for commonly used symbols, and for annotation text. This is done using the U: field.

- ▶ Once defined, the letter shortcut may be used any time the defined symbol or text is to be used.
- ▶ If defined in the **File Header**, the shortcut applies to all tunes in the abc document.
- ▶ If defined in the **Tune Header**, the shortcut applies only in that one tune.
- ▶ Here are a couple examples to illustrate redefinable symbols:

```
U: S = !slide!      % DEF SG>F GB puts a slide before the G
U: p = "^+"        % ABcA F2pE2 puts a + over the E
```

Special Characters

The following characters should be understood. Enter what is shown under *Encodings* to get what is shown in *Examples*.

Accent	Examples	Encodings
grave	À à è ò	\`A \`a \`e \`o
acute	Á á é ó	\'A \'a \'e \'o
circumflex	Â â ê ô	\^A \^a \^e \^o
tilde	Ã ã ñ õ	\~A \~a \~n \~o
umlaut	Ä ä ë ö	\"A \"a \"e \"o
cedilla	Ç ç	\cC \cc

Accent	Examples	Encodings
ring	Å å	\AA \aa
slash	Ø ø	\/O \/o
breve	Ă ă Ę ę	\uA \ua \uE \ue
caron	Š š Ž ž	\vS \vs \vZ \vz
double acute	Ő ő Ű ú	\HO \Ho \HU \Hu
ligatures	ß Æ æ œ	\ss \AE \ae \oe

From the abc 2.2 standard

Chords & Unisons

Two or more notes played or sung together constitute a **chord**. Chords may be written as chord symbols above (or below) the melody line, or as more than one notehead on a single stem. If a chord contains more than one of the same note (e.g. on a fiddle, an open E and an E on the A string), it is a **unison**.

Multiple Noteheads Per Stem

Use `[]` around notes to produce multiple noteheads per stem.

- ▶ If both notes are the same it will be a **unison**.
- ▶ Modifiers to length can come after brackets: e.g. `[AC]2 = [A2C2]`.

Chord Symbols

Use double quotes for chords; e.g. `"Am7"`

- ▶ Again, be sure to turn off smart quotes.
- ▶ Chords may be accompanied by bass notes, e.g. to indicate a bass line.
 - ★ For example, an A7 chord with an E bass note would be `"A7/E"`
- ▶ Here is the format for more complex chords:
 - ★ `<chord name><accidental><type></bass>` where
 - `<chord name>` = letter name of chord ("A")
 - `<accidental>` = b or #
 - `<type>` = m, dim, 7, etc. (see table of types below)
 - `</bass>` = "/" followed by bass note name
- ▶ **Usable chord types** are as follows:

<code>m, min</code>	minor
<code>maj</code>	major
<code>dim</code>	diminished
<code>aug, +</code>	augmented
<code>sus</code>	sustained
<code>7, 9</code>	7th, 9th or other number

Using Voice Overlays with Unison Drones

Unison drones are written out as stems with two noteheads. In my experience the default in fiddle music is one notehead with two stems, one pointing up and the other down. In abc notation the default seems to be one stem with two noteheads. Displaying unisons with a single notehead may be accomplished with **voice overlays**: temporary use of multiple voices, as shown below.

Here are a couple ways to set up unison drones.

The Default Method

Em



Here I used voice overlays

Em



But they can be tricky

Em



- ▶ The first method uses the following code, which is a fairly standard way of notating unisons:

```
"Em" [ee]2 > e2 efed |
```

- ▶ The second uses **voice overlays**:

```
(& "Em" e2>x2 x4 & e2>e2 efed &) |
```

- ★ The (& [abc code] & [abc code] &) structure allows for two temporary voices in the same measure, separated by the middle "&".
- ★ As there's only one drone note, I used invisible rests ("x") to fill out the first voice.

- ▶ The third example also uses voice overlays, but I put all the notes in the first voice:

```
(&"Em" se2>e2 efed & e2>x2 x4 &) |
```

- ★ From this we can see that the first voice has upward stems and the second voice has downward stems.

Page Layout and the Use of Text in abc Documents and Scores

Text in abc Documents

Text Outside the Staff

An abc file may contain **free text** and **typeset text** outside of the staff.

- ▶ **Free text** is intended to be for annotation and is not generally printed.
 - ★ It can occur anywhere in an abc file but must be separated from surrounding

text by **blank lines**.

- ▶ **Typeset text** is intended to be printed; the details are governed by **text directives**.
- ▶ **Comments**. Anything that occurs after a % sign will be ignored. It may be either in the middle of a line or at the beginning of a new line.
 - ★ To include a % symbol in the text to be displayed or printed: Type \%.
- ▶ The easiest way to designate text to be printed is to start a new line with %%text followed by a text string; each new line must start with %%text.
- ▶ For a more detailed discussion of typeset text, see the abc 2.2 standard, section 11.4.

Text Inside the Staff

There are two main categories of text inside the staff: **annotations** and **lyrics**. This guide doesn't deal with songs, so we will look at **annotations**.

Annotations: Text may be added within the staff. Annotations are surrounded by double quotations like a chord, but the text string is preceded by a symbol that indicates where it should be placed:

- ▶ "**^** text": prints "text" above the staff, very much like a chord
- ▶ "**_** text": prints "text" below the staff
- ▶ "**<** text" and "**>** text": print "text" to the left or right of a note
 - ★ So "**<**(" **>**)" e would put parentheses around an "e" note.
- ▶ "**@<x>,<y>** text" (where <x> and <y> are numbers): prints "text" offset by <x> and <y> points from the position of the symbol being annotated.
 - ★ Note that the annotation of two different notes could have the same description but be at different heights relative to the staff.

The use of text annotations will be illustrated in the next section.

Blank Space in abc Documents

For purposes of legibility it is often desirable to leave blank space both in an abc document and in the resulting musical notation. Here are several categories of blank space and how to achieve them, followed by examples.

- ▶ **The abc code document**. There are two easy ways to leave blank space.

- ★ Space *within* a line helps legibility. Just use the spacebar as seems desirable. There are a few places where that affects the score but usually it can be worked around.
- ★ Space *between* lines is also helpful. A blank line doesn't work inside a tune but you can insert a blank comment — a line containing only a percent sign.

Here are a couple examples of leaving blank space in an abc document.

Leaving Space: The abc Document

Here are some examples of leaving space in a document to improve readability. (This is the ending of the B part of Marcel Messervier's Reel des Accordionistes.)

First, this is what it looks like with minimal use of space (code first, then resulting score).

```
"D/A"A2FA "Bm"d2cd|"Em"efec "A7"dcBA|1
"D"FA"A7"Bc "D7":|2 "D"FA"A7"Bc "D7"d2de|]
```

That code is pretty hard to read. Here I've added some space in the abc file to improve readability. A couple other changes were made for space reasons but they don't affect the score.

```
"D/A" A2FA "Bm" d2cd      | "Em" efec "A7" dcBA |
|1 "D" FA "A7" Bc "D7" :|2\
"D" FA"A7"Bc "D7" d2de  |]
```

[The score is unchanged so it's omitted here]

In a larger abc file it can be desirable to add space to line up bar lines.

Blank Space in the Resulting Score

Again we need both horizontal and vertical space; and we can insert breaks in a staff as well.

- ▶ **Horizontal space** may be created by typing a "y", or more than one if desired. A "y" followed by a number indicates how much space; e.g. "y40" would mean to add 40 pixels of space.
- ▶ **Vertical space** is added with the *vskip* command. Start a new line and enter `%%vskip 20` to get twenty pixels of vertical space.
- ▶ Staff breaks (horizontal spaces between parts of a staff) are created with the *staffbreak* command. On a new line, you may enter `%%staffbreak 2cm` to

get a break two centimeters wide.

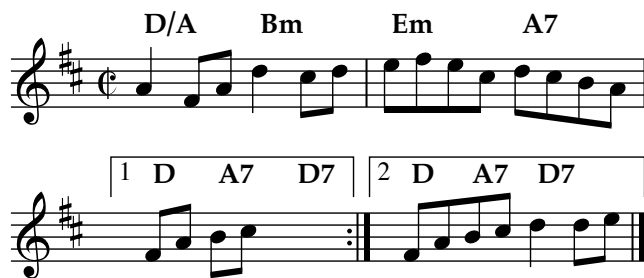
Here is an example illustrating the use of blank space in an abc score.

Leaving Space: The Printed Score

There's still a problem. In the second line the chords are really poorly spaced. Lets look at improving spacing in the resulting notation.

Let's start with adding in some *horizontal space* to get the chords a bit better spaced. This is accomplished with a *y*. We can use two or more *y* characters or use a number to indicate how much space.

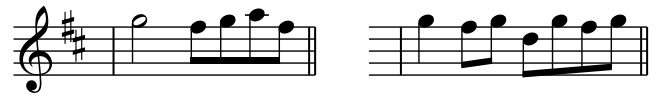
```
"D/A" A2FA "Bm" d2cd |\  
"Em" efec "A7" dcBA |1  
"D" FA "A7" Bc "D7" y40 :|2\  
"D" FA"A7"Bc "D7" d2de |]
```



We may want some *vertical space* between elements of the score. In the abc code I used the *vskip* command throughout for that purpose.

Finally, we might want a *break* in the staff, for example when illustrating two different variations. This is done with the *staffbreak* command.

```
| g4 fgaf ||\  
%%staffbreak .5cm  
| g2fg dgfg ||
```



Printing & The Use of Fonts in abc Notation

Although many people are unaware of it, and isn't always documented all that well or all that completely, nearly all aspects of an abc document may be customized, often with considerable flexibility. Fonts fall into that category. There are some weaknesses, limitations and areas of potential confusion.

Some Issues Related to Printing

- ▶ If you try to print directly from an abc app (e.g. *EasyABC*), the result will generally be of low quality because it is likely to be based on the screen image.
- ▶ Quality printouts of music based on abc notation usually make use of either **abcm2ps** or **abc2svg** to transform the code into a highquality printout. There are some important differences between them.

- ★ *Underlying mechanism:* abcm2ps uses Postscript and abc2svg uses svg images for the printout.
- ★ Therefore abcm2ps uses the PDF format and makes use of Postscript fonts, whereas abc2svg (which is a Javascript application) can handle more modern font formats.
- ★ Currently abcm2ps is better at handling situations where precise layout is concerned, whereas abc2svg is better at handling modern fonts and is being actively developed. It will likely be able to handle a greater variety of page layout situations in the near future.

► Below are cropped printouts to illustrate the differences that may occur.

- ★ Printed from: *Left*—EasyABC; *Center*—abcm2ps; *Right*—abc2svg

Notating Pitch

G A B c d



Printed from EasyABC

Notating Pitch

G A B c d



Printed from abcm2ps

Notating Pitch

G A B c d



Printed from abc2svg

- ★ From this we can see that the EasyABC printout is substantially lower in quality than the others (although better than printouts directly from the abc software are sometimes); and there are font differences between the abcm2ps and abc2svg outputs.

Use of Fonts With abc Notation

With abc notation, Times, Helvetica and Courier and their stylistic variants are the default available fonts. Other fonts should be declared at the beginning of an abc document. For example:

```
%%font          Palatino-Roman
%%font          Palatino-Bold
%%font          Palatino-Italic
%%font          Palatino-BoldItalic
```

Different categories of text may then be declared, with corresponding fonts and sizes. These declarations may be modified within the tune as needed. For example:

```
%%titlefont     Palatino-Bold 20    % Font of title
%%subtitlefont  Palatino-Italic 16  % Font of second title
%%composerfont  Palatino-Italic 14  % As it says; also O: (on same
    line)
%%tempofont     Palatino-Roman 14   % As it says
%%gchordfont    Palatino-Bold 14    % Chord font
%%partsfont     Palatino-Bold 14    % Parts font (sequence above score
    % label parts of tune (A, B, C ...))
%%historyfont   Palatino-Roman 14   % History (H:) + Source (S:), Notes
    % (N:) & Transcription (Z:)
%%annotationfont Palatino-Roman 14  % For annotations, discussed above
%%textfont      Palatino-Roman 14   % For lines of text
%%infofont      Palatino-Bold 16    % Infoline font (combined R: & A:)

%%setfont-1     Times-Bold 16       % allows changing font within a
%%setfont-2     Times-Italic 16     % string. $1, $2 to change, $0 to
    % change back to the default
```

- ▶ Some of this I haven't seen documented anywhere (although likely it is and I just haven't seen it). In particular, I've not seen anything about formatting the Notes field, and had no idea it was done with the `historyfont` directive. But experimentation made it quite clear that's how it works.

An Example To Illustrate Many of These Concepts Together

This example documents a couple details of New Hampshire fiddler Marcel Robidas' playing of the tune "You Married My Daughter But Yet You Didn't". It will be followed by the abc code that produced it.

Use of Annotations, Text, Spacing and More

Example from playing of New Hampshire fiddler Marcel Robidas

Here are a couple common melodic variations.

*Often in the A part (measures 1, 3, 5)
a half note is used for emphasis.*

*Marcel Robidas would pluck the
E string in the B part, measure 7.*

The image shows three musical staves. The first staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It shows a half note on A1 followed by a quarter note on A5, then a quarter note on G4, a quarter note on F4, and a quarter note on E4. The second staff is in bass clef with a key signature of one sharp (F#) and a common time signature (C). It shows a half note on A3 followed by a quarter note on G3, a quarter note on F3, and a quarter note on E3. The third staff is in bass clef with a key signature of one sharp (F#) and a common time signature (C). It shows a half note on B7,8 followed by a quarter note on A7, a quarter note on G7, a quarter note on F7, and a quarter note on E7. A plus sign (+) is placed above the B7,8 note.

Here is the abc code that produced it. The font definitions on the previous page are all included at the beginning of the document; I won't repeat them here. The comments on the right explain most of what's going on,

```
X:10
T:Use of Annotations, Text, Spacing and More
T:Example from playing of New Hampshire fiddler Marcel Robidas
M:C|
L:1/8
K:D
%                               % Blank comments for readability
%%vskip 20                       % Adding in space
%%text Here are a couple common melodic variations. % Text within the
%%vskip 75                       % document.
%
"@0,60 Often in the A part (measures 1, 3, 5)"\ % The next few lines
"@0,40 a half note is used for emphasis."      % format the annotations.
"@340,60 Marcel Robidas would pluck the"\
"@340,40 E string in the B part, measure 7."
%
|"^A1 & A5" g4 fgaf ||\
%%staffbreak .5cm                % Breaks in the staff
|"^A3" f4 efge ||\
%%staffbreak 1.5cm
|^B7,8" F2!+!e2 dcBA | G4 :|\
```

The text annotations may need some explanation. The @0,60 tells the software to put the text that follows 0 points to the right of the note that follows it, and 60 points above. As there are four lines of annotations before the tune starts, all are with respect

to the same note.

Text to the Left of an Indented Staff

Suppose a tune has an Introduction that isn't repeated again. One way to set it off is to indent the staff and put the word "Introduction" to its left. Here's an example from the square dance tune *Don't Dilly Dally*.

Don't Dilly Dally

Text to the Left of an Indented Staff

The image shows two staves of musical notation for the tune "Don't Dilly Dally". The first staff is labeled "Introduction" and is indented to the right. Above the notes are chords: F, F, Bb, Bb, C7, C7, F, F. The second staff is the main body of the tune, with the text "Text to the Left of an Indented Staff" positioned above it. Above the notes are chords: F, F, G7, G7, C7, C7, F, F. The key signature has one flat (Bb) and the time signature is 2/4.

This is fairly easy to do using the annotations described above and the `Indent` parameter. Here is the code responsible for it with explanatory comments.

```
X:11
T:Don't Dilly Dally
T:Text to the Left of an Indented Staff
M:2/4
L:1/8
K:F
%%annotationfont Palatino-Roman 16      % Defines the annotation font
%%indent 150                             % Indents the first staff by
                                           % specified amount
"@-170,0 Introduction"                  % Moves annotation to the left by
                                           % specified amount.
"F" F2F>G | "F" AG F2 | "Bb" G2 GA      | "Bb" BGAB |\
"C7" c2 d2 | "C7" A2 G2 | "F" F4-       | "F" F3 ||
|: A |\
"F" c2 d2 | "F" A2 GF | "G7" G A2 G     | "G7" D4 |\
"C7" E2 c>c | "C7" cBG^G | "F" A4 -     | "F" A4 |
```

The `indent` command moves the first staff to the right, and the `@` parameter moves the annotation text to the left of the staff.

EasyABC Shortcuts

EasyABC is one of the most widely used abc applications.

- ▶ EasyABC was written by Nils Liberg. Several years ago he had to stop developing it, and it was taken over as open source software.
- ▶ Documentation for EasyABC and most of the shortcuts below and others are listed at <http://www.nilsliberg.se/ksp/easyabc/>.
- ▶ Documentation for the more recent updates, including more useful shortcuts and techniques is found at <http://easyabc.sourceforge.net>.
- ▶ To download the current versio of EasyABC, go to <https://sourceforge.net/projects/easyabc/?source=directory>.

Here are some shortcuts and tricks I've found (or figured out). Some may be usable in other software. Some don't work unless explicitly enabled (and some may make things more difficult for some people or in some circumstances).

Musical Notation Shortcuts

Bar Lines

- ▶ Type a *<Tab>* to insert a bar line.
- ▶ If enabled, when a measure is full typing a *<Space>* will insert a bar line. To enable: *Settings ABC Typing Assistance → Add Bar*

Automatic Upper/Lower Case:

- ▶ Choose *Settings → ABC Typing Assistance → Automatic uppercase/lowercase* to enable.
- ▶ If the case is incorrect, delete the letter, hold the *<Shift>* key, and the case will be reversed.

Add Matching Right Symbol:

- ▶ Choose *Settings → ABC Typing Assistance → Add Matching Right Symbol* to enable.
- ▶ Typing a “(“, “[“, “{“, double quotation mark results in the matching right symbol is entered automatically.

Some Additional Shortcuts

Slurs: Select two or more notes and type “(“ or “)” to add a slur around the selected notes (or remove it if already present).

Dotted Rhythm: Select multiples of two notes and type “<“ or “>”. For example, selecting “AB CD” and typing “>” produces “A>B C>D”.

Playback Shortcuts

To play the Entire Tune: Click on the *Play* button (, upper left) or type *[Shift-F6]*.

Loop playback: Double-click on the *Play* button. (I'm not sure this one really works.)

Skip repeats: *Control + Play* button.

To play from the middle: Use the *Play position* slider.

Some Additional Useful Links

Here are a few useful links for abc notation.

The abc Notation Home Page: <http://abcnotation.com>

Software recommendations from Chris Walshaw: <http://abcnotation.com/blog/2017/11/12/6-of-the-best-a-guide-to-abc-software/>

abc Software Downloads: <http://abcnotation.com/software>

The abc Standard, versions 2.1 (current) and 2.2 (in progress):

<http://abcnotation.com/wiki/abc:standard:v2.1> and

<http://abcnotation.com/wiki/abc:standard:v2.2>

This help file: <http://nhcountrydance.com/fiddle/assets/abc-2.2-help-file.pdf>

abc Users Group List: <https://groups.yahoo.com/neo/groups/abcusers/info>