NAME
        autosp − preprocessor to generate note-spacing commands for MusiXTeX scores

SYNOPSIS
        autosp [**−v** | **−−version** | **−h** | **−−help**]

        autosp [**−d** | **−−dotted**] [**−l** | **−−log**] *infile*[.aspc | .tex] [*outfile*[.tex]]

        This program makes it easier to create MusiXTeX scores by converting (non-standard) commands of the
        form \anotes ... \en into one or more conventional note-spacing commands (\notes \Notes \NOtes ...), deter-
        mined by the actual note values, with \sk spacing commands inserted as necessary. The coding for an entire
        measure can be entered one part at a time, without concern for note-spacing changes within the part or
        spacing requirements of other parts.

        For example, if applied to

            \anotes\qa J\qa K&\ca l\qa m\ca n\en

        autosp generates

            \Notes\qa J\sk\qa K\sk&\ca l\qa m\sk\ca n\en

        Typically, an \anotes command is expanded into several conventional note-spacing commands.

        If the *infile* argument has .tex extension, **autosp** will process conventional note-spacing commands (but not
        \vnotes or \znotes) similarly. This is intended to correct spacing in an extracted single-instrument part, but
        may not produce satisfactory output when applied to a conventional multi-instrument MusiXTeX score.

        If the *infile* argument has neither .aspc nor .tex extension, input is taken from *infile*.aspc if that file exists, or
        from *infile*.tex otherwise.

        For \anotes commands (and, for a .tex file, all conventional note-spacing commands), line breaks and
        spaces may precede note segments, allowing more flexible source formatting; the line breaks and spaces
        will be elided from the output.

        For example,

         \anotes
           \ibl0K0\qb0K\nbbl0\qb0{.K}\tbbbl0\tbbl0\tql0L&
           \ibbl1m{-2}\qb1{.m}\tbbbl1\tbbl1\qb1l\tql1k\en

        is acceptable and generates

         \notesp\ibl0K0\qb0K&\ibbl1m{-2}\qb1{.m}\en
         \nnotes\sk&\tbbbl1\tbbl1\qb1l\en
         \notesp\nbbl0\qb0{.K}&\tql1k\en
         \nnotes\tbbbl0\tbbl0\tql0L&\sk\en

        If no *outfile* argument is provided, output goes to *infile*.tex if the *infile* name has extension .aspc, or to stan-
        dard output otherwise.

If the **–l** (**−−log**) option is used, a log *infile*.alog is generated.

If the **–d** (**--dotted**) option is used, *dotted* beam notes of the form \qb{*n*}{.*p*} are *not* given extra space; it is assumed that the subsequent note will be shifted by a \roff-like command or a spacing command such as \qsk or \hqsk. Commands of the form \qlp{*p*}, \qlpp{*p*}, ..., \qpb{*n*}{*p*} and \qppb{*n*}{*p*} are always spaced as indicated.

If there is a single staff, consecutive whole-bar rest bars are merged into a multi-bar rest. Bar-centered rests can be coded using the standard \def\atnextbar notation but also the non-standard command \Cpause in a note segment generates a bar-centered rest.

Spacing commands \sk and \hsk in the source are discarded, but not \qsk, \hqsk or \qqsk; moreover non-standard commands \Qsk, \HQsk and \QQsk generate "global" skips; i.e., the effect of \qsk, \hqsk or \qqsk in *every* staff.

A note segment can be completely empty, but if a note segment should start with or contain a "space," the note-value of that space must be made explicit with a command of the form \ha{*}, \qa{.*}, \qa{*}, \ca{*}, etc.

All other conventional MusiXTeX commands are output exactly as given in the input.

OPERATION

autosp determines the spacing for ordinary notes from the note commands themselves; for example,

+   \qa, \qu, \ql, \qp result in \NOtes;

+   \ca, \cu, \cl, \ds result in \Notes;

and so on.

The spacing for *beamed* notes is determined by the beam multiplicity, so that \ib... results in \Notes, \ibb... results in \notes, etc.

Collective coding of note sequences (including accidentals and dots) is handled by expanding the sequence into a sequence of individual note commands.

LIMITATIONS

autosp assumes that & and | (rather than \nextinstrument and \nextstaff) are used to separate instruments and staffs.

Appoggiaturas and grace notes are recognized by the use of \tinynotesize; note-spacing of 1.45\elemskip is used. If this isn't suitable and can't be corrected with a small skip, a \vnotes command with any desired spacing can be used.

autosp supports *x-tuplets* introduced using \xtuplet{*x*} and *triplets* introduced using any of the following commands (regardless of any re-definition of \txt or \tuplettxt):

 \triolet
 \uptrio
 \downtrio
 \uptuplet
 \downtuplet

However, MusiXTeX notation does not specify the *intended* duration of an x-tuplet. **autosp** assumes that an x-tuplet is to be played in $(x-1)/x$ of the apparent x-tuplet duration. So, for example, a triplet in eighths is assumed to be played in the time of one quarter note. If this assumption isn't valid, the x-tuplet must be coded explicitly using a \vnotes command; see the first measure of barsant2.aspc for an example of a non-standard x-tuplet: a 5-tuple of 64th notes with an intended duration of *six* 64ths. **autosp** cannot deal with simultaneous x-tuplets in multiple staffs unless the x values and note durations are identical. Global skips (\QQsk, \HQsk and \Qsk) are ineffective if a staff has an x-tuplet; however, "local" skips (\qqsk, \hqsk, \qsk) are effective.

User-defined macros are not processed or expanded.

All staffs are assumed to have the same meter; see kinder2.aspc for an example of how to work around this.

autosp may not be effective for music with more than one voice in a single staff. It might be advisable to use a separate staff for each voice, to avoid \anotes when necessary, or to omit certain voices initially and add them into the resulting TeX file.

EXAMPLES
See files quod2.aspc, kinder2.aspc, geminiani.aspc and barsant2.aspc for scores suitable for input to **autosp**.

SEE ALSO
msxlint(1)

musixdoc.pdf

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