

Unicode request for musical bowing symbols

Gavin Jared Bala, gavinjared, gmail.com

Kirk Miller, kirkmiller, gmail.com

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This request is for two musical symbols that indicate special bowing techniques. These are standard symbols passing through the stem of a note; see the figures from Gould and Stone. They should be treated as combining with a stem.

There was some discussion at SEW as to how these marks should be represented. The closest analogy would seem to be 1D166 MUSICAL SYMBOL COMBINING SPRECHGESANG STEM. The *Sprechgesang* mark is shown on the Unicode chart precomposed with a stem, even though the stem is not integral to the symbol. For example, there is no stem when it combines with a whole note (Figure 2). In such cases the rendering software is expected to suppress the stem. (That is, there is no need for an additional Unicode character for a stemless *Sprechgesang* mark.) In Figure 3, we see that the requested bowing marks may retain their precomposed stem even when there is no stem on the note for them to combine with. We do not know if there are publishers who do not provide a stem in such situations, but if there are, the rendering software can handle that detail as it does for the *Sprechgesang* mark.

Thanks to the International Music Score Library Project (<https://imslp.org>) for facilitating access to public-domain music scores.

Characters

The proposed characters, along with their PUA points in the Standard Music Font Layout (SMuFL) specification, are:

Bowing marks



U+1D280 MUSICAL SYMBOL COMBINING STEM BOW BEHIND BRIDGE [SMuFL E214]



U+1D281 MUSICAL SYMBOL COMBINING STEM BOW ON TOP OF BRIDGE [SMuFL E215]

Properties

The bowing marks are treated as combining stems, analogous to 1D166 MUSICAL SYMBOL COMBINING SPRECHGESANG STEM. As with the *Sprechgesang*, it is possible a typographer may drop the stem when these bowing marks combine with whole notes, tuples and the like, though in the illustrations below they do not.

1D280;MUSICAL SYMBOL COMBINING STEM BOW BEHIND BRIDGE;Mc;216;L;;;;;N;;;;;

1D281;MUSICAL SYMBOL COMBINING STEM BOW ON TOP OF BRIDGE;Mc;216;L;;;;;N;;;;;

References

Gould, Elaine (2011). *Behind Bars: The Definitive Guide to Musical Notation*. Faber Music, London.

Stone, Kurt (1980). *Musical Notation in the Twentieth Century: A Practical Guidebook*. W. W. Norton & Company, New York and London.

Chart

1D250 Musical Symbols Supplement 1D28F

	1D25	1D26	1D27	1D28
0				
1				
2				
3				
4		<i>n</i>		
5				
6				
7				
8				
9				
A				
B				
C				
D				
E			T A B	
F				

Figures

The following symbols may be attached to the relevant stems and adopted for repeated use (to avoid copious instructions), as long as they are defined at their first appearance. The symbols reflect the curved shape of the bridge:

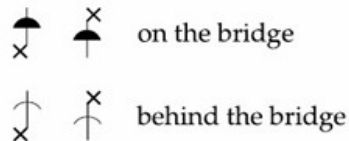


Fig. 1. Gould (2011: 408). Bowing marks combine with the stems of notes such as these quarter notes. (The x-shaped noteheads indicate that these are percussive ‘ghost’ notes.)

The image shows a musical score for Arnold Schoenberg's *Pierrot lunaire* No. 21, 'O alter Duft'. The score is in G major and 3/4 time. The vocal line is marked with 'Sprechgesang' and 'poco rit.'. The lyrics are 'al - ter Duft aus Mär - chen.zeit, be - rau - schest wie - der mich. All meinen'. The score is divided into measures, with measure 15 circled in blue. A blue box highlights the stems of the quarter and eighth notes in measures 15 and 16. A red box highlights a whole note in measure 17, where the Sprechgesang mark floats above the note. The score also includes markings for 'Tempo' and 'ppp'.

Fig. 2. Arnold Schoenberg, *Pierrot lunaire* No. 21 'O alter Duft,' illustrating the behaviour of the *Sprechgesang* mark. With quarter and eighth notes (blue), the mark combines with the stems of those notes. Where there is no stem to attach to, such as the whole note in the 4th measure (red), the mark floats above or below the note.

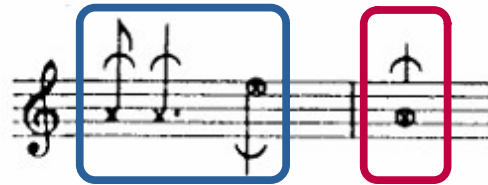
Bridge

A. Bowing behind the Bridge

The sign of a curved “bridge” should be used, regardless of the notational method employed (see below). The note-heads should be x-shaped.

1. ORDINARY FIVE-LINE-STAFF NOTATION

The stems must be fairly long, especially those with flags, to provide enough space outside the staff for the bridge symbol to be clearly visible:



If several consecutive notes are to be bowed behind the bridge, a broken continuation line may be used:



B. Bowing on Top of the Bridge

For details, see Bowing behind the Bridge above.

Observe that the bridge symbol differs somewhat from that for bowing behind the bridge.

The pitch is indeterminate, although the sound changes from string to string. Fingering does not affect it.



n.b.: This notation must not be confused with *ponticello* playing, which actually means next to the bridge, rather than on top of it.

Fig. 3. Stone (1980: 308–309). In these illustrations, the bowing marks have a stem even where the notes do not (the whole notes in the first and last illustrations, in red), or where the marks do not intersect with the stems (the triplet in the second illustration, in orange). In blue are eighth, quarter and half notes where the bowing marks combine with the stem as they do in Figure 1.

**ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹.**

Please read Principles and Procedures Document (P & P) from std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html
for guidelines and details before filling this form.

Please ensure you are using the latest Form from std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest *Roadmaps*.

A. Administrative

1. **Title:** Unicode request for miscellaneous musical symbols

2. Requester's name: Gavin Jared Bala, Kirk Miller

3. Requester type (Member body/Liaison/Individual contribution): individual

4. Submission date: 2025 January 03

5. Requester's reference (if applicable): _____

6. Choose one of the following:

This is a complete proposal: yes

(or) More information will be provided later: _____

B. Technical – General

1. Choose one of the following:

a. This proposal is for a new script (set of characters): no
Proposed name of script: _____

b. The proposal is for addition of character(s) to an existing block: yes
Name of the existing block: Musical Symbols Supplement

2. Number of characters in proposal: 2

3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary	<input checked="" type="checkbox"/>	B.1-Specialized (small collection)	<input type="checkbox"/>	B.2-Specialized (large collection)	<input type="checkbox"/>
C-Major extinct	<input type="checkbox"/>	D-Attested extinct	<input type="checkbox"/>	E-Minor extinct	<input type="checkbox"/>
F-Archaic Hieroglyphic or Ideographic	<input type="checkbox"/>	G-Obscure or questionable usage symbols		<input type="checkbox"/>	<input type="checkbox"/>

4. Is a repertoire including character names provided?

a. If YES, are names in accordance with character naming guidelines in P&P document Annex L? yes

b. Are the character shapes attached in a legible form suitable for review? yes

5. Fonts related:

a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
Kirk Miller

b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
Bravura fonts are licensed under the SIL Open Font License

6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? yes

b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? yes

7. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? no

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at www.unicode.org for such information on other scripts. Also see Unicode Character Database (www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

¹ Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain	<i>no</i>
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? If YES, with whom? If YES, available relevant documents:	<i>yes</i> <i>One of the proposers is a member of the user community</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference:	
4. The context of use for the proposed characters (type of use; common or rare) Reference:	<i>music</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference:	<i>yes</i> <i>See figures</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? If YES, reference:	<i>no</i>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	<i>yes</i>
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? If YES, reference:	<i>no</i>
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? If YES, reference:	<i>no</i>
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character? If YES, is a rationale for its inclusion provided? If YES, reference:	<i>no</i>
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided? If YES, reference: Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? If YES, reference:	<i>no</i>
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary)	<i>no</i>
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:	<i>no</i>