LeporellionMusicTypewriter 1 (v2)

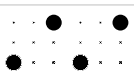
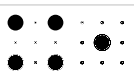
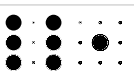
1a // An introduction in the Law of Octaves by using an consonantal Alphabet on a Piano

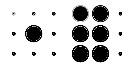
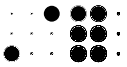
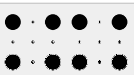
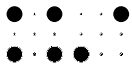
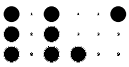
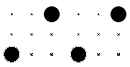
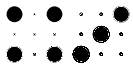
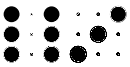
a. Music notation now and then

The piano has 88 keys thereof 52 are white. Each full octaves has 5 black and 7 white keys (c, d, e, f, g, a, h respectively b). The conventional Alphabet has 26 letters. We are using the first white 26 keys on a Piano for upper cases (A - Z) and the rest for lower cases (a - z). The black keys used for vowels (a, e, i, o and u). We are adding these vowels to each upper and lower cases. For flat notes we put the vowels first (e.g. ub, B = Bb2, B2 / b, ib = g1, ges1), for sharp notes we put vowels after (e.g. A, Au = A2, AIS2 / a, ai = f1, fis1). The blacks keys always representing a pair of consonant and vowels.
We use a dot stamping with subtext for the glyphs similar-looking to a LeporellionVisualBraille (9-dot-Braille). We don´t differentiate between bass clef and treple clef. We are using a font instead of sheets of music!!! For frequent syllables and literal characters (ae, oe, ue, ch, sch, st, sz or -ing and so on) you should build chords manualy by using the font with a Smart Keyboard.
We trigger full notes for A to Z with SHIFT-keying (white keys), flat and sharp notes (black keys) with ALT-SHIFT-keying. To write flat and sharp notes for lower cases a to z we are using ALT-keying. The numbers keys from 0 to 9 have completely flat notes which are triggered by using ALT- and ALT-SHIFT-keying. The font MusicTypewriter 1 Regular/Standard (v2) contains 124 glyphs thereof visualized tones that represents 52 white keys and 2 times 36 black keys (sharp/flat tones) on a Piano.
I was using Inkscape and Vector Magic to create Scalable Vector Graphics on a MacOS System with a Smart Keyboard (QWERTZ). Then the font is generated with Fontastic. You need to install the MusicTypewriter 1 Regular/Standard (v2) from my GitHub account.

b1. Law of Octaves applied on upper and lower cases

The MusicTypewriter 1 Regular (v2) uses a paired dot stamping that must read square by square: First row (**square 1, 2**) and 2nd row (**square 3,4**). These are compatible with 9-dot-Braille what the numeric 0 to 9 concerns. The first row marks the Octaves. The second row marks the Piano keying. We replace the notes c, d, e, f, g, a, h respectively b with the numerics 3, 4, 5, 6, 7, 1, 2. But a change to the next higher Octave can be identified by the key assignment (piano key 01-88).
The Octaves range from A2 to e1 marks the upper cases from A to Z and are assigned to the first 26 white keys from the left to the middle (piano key 01-44). The Octaves range from f1 to c5 marks the lower cases from a to z and are also assigned to 26 white keys from the right upwards (piano key 45-88). Now all 52 white keys on the Piano are alphabetically assigned.

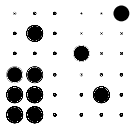
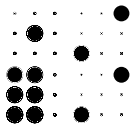
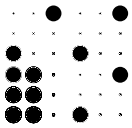
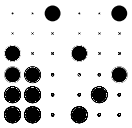
Octave							
Piano							
Sound	A2	B2	C1	D1	E1	F1	G1
Letter	A	B	C	D	E	F	G
Piano	01	03	04	06	08	09	11
Octave							
Piano							
Sound	A1	B1	C	D	E	F	G
Letter	H	I	J	K	L	M	N
Piano	13	15	16	18	20	21	23
Octave							
Piano							
Sound	A	B	c	d	e	f	g
Letter	O	P	Q	R	S	T	U
Piano	25	27	28	30	32	33	35

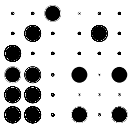
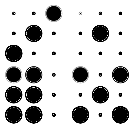
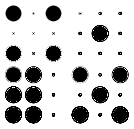
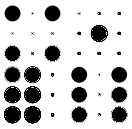
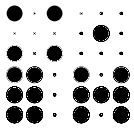
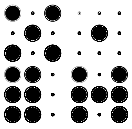
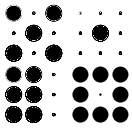
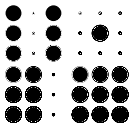
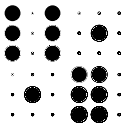
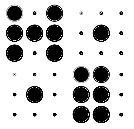
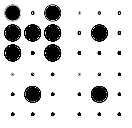
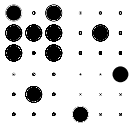
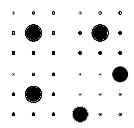
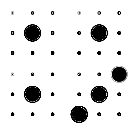
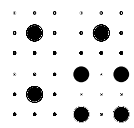
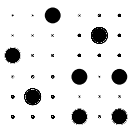
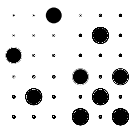
Octave							
Piano							
Sound	a	b	c1	d1	e1	f1	g1
Letter	V	W	X	Y	Z	a	b
Piano	37	39	40	42	44	45	47
Octave							
Piano							
Sound	a1	b1	c2	d2	e2	f2	g2
Letter	c	d	e	f	g	h	i
Piano	49	51	52	54	56	57	59
Octave							
Piano							
Sound	a2	b2	c3	d3	e3	f3	g3
Letter	j	k	l	m	n	o	p
Piano	61	63	64	66	68	69	71
Octave							
Piano							
Sound	a3	b3	c4	d4	e4	f4	g4
Letter	q	r	s	t	u	v	w
Piano	73	75	76	78	80	81	83
Octave							
Piano							
Sound	a4	b4	c5				
Letter	x	y	z				
Piano	85	87	88				

I have deliberately renounced a break in the table so that Prime, Second, Third (Terz), Fourth (Quarte), Fifth (Quinte), Sixth (Sexte), seventh (Septime) and Octave are above each other. The upper case Z was assigned to the 44 key. The lower cases starts on 45 key.

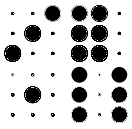
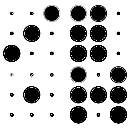
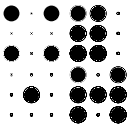
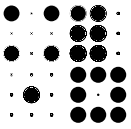
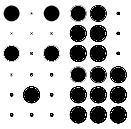
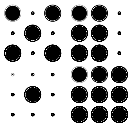
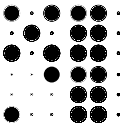
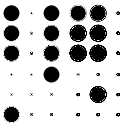
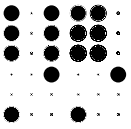
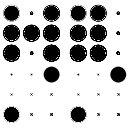
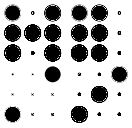
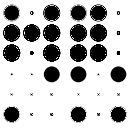
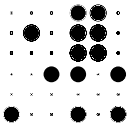
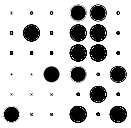
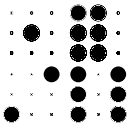
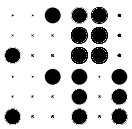
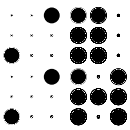
b2. Law of Octaves applied on vowels

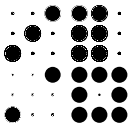
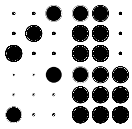
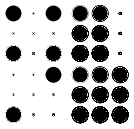
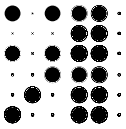
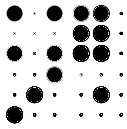
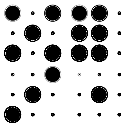
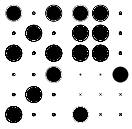
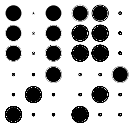
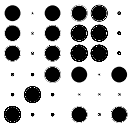
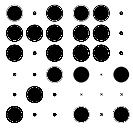
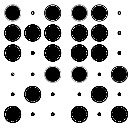
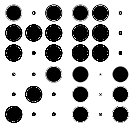
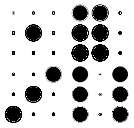
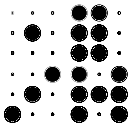
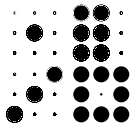
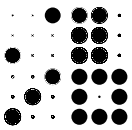
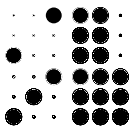
Now let's look at the black keys on the piano. The Subcontra-Octave knows only one black key and two white keys. In contrast, there is no black key in the five-line Octave (c5) that has only one white key. The Contra-Octave, Big Octave, Small Octave, the one-line, two-line, three-line and four-line Octaves have always 7 white keys and 5 black keys. The black keys each contain two tones, that is, lowered (b, flat) and raised (s, sharp) notes.
But how do we deal with the five vowels a, e, i, o and u? The upper and lower case letters are prefixed to the vowels in order to form the consonant pairs for sharp notes (e.g. ais, cis, dis, fis, gis). The vowels are suffixed to the lower and upper case letters to form the consonant pairs for flat notes (e.g. as, des, es, ges). On the Smart keyboard (QWERTZ) we trigger the glyphs via ALT-SHIFT-keying. However, we have more sharp and flat notes than graphical letters, so we have to include the number keys as well.
The designation of the Octaves in the first row remains (**square 1,2**), but the key assignment in the second row (**square 3,4**) changes. The following table shows the glyphs in the respective Octaves.

Subcontra-Octave (bass clef)			
A2	AIS2	Bb2	B2
			
A	au	ub	B
SHIFT <a>	ALT-SHIFT <a>	ALT-SHIFT <b>	SHIFT <b>

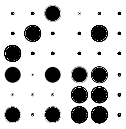
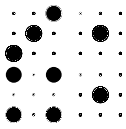
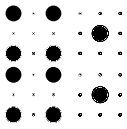
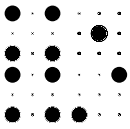
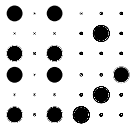
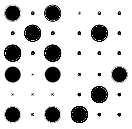
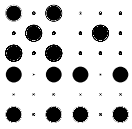
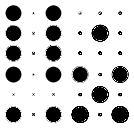
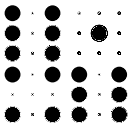
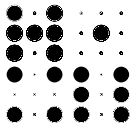
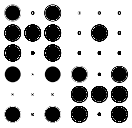
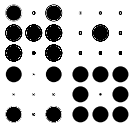
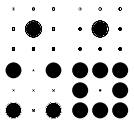
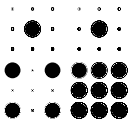
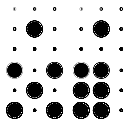
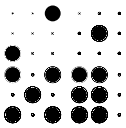
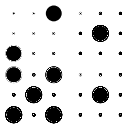
Contra-Octave (bass clef)				
C1	CIS1	DES1	D1	DIS1
 C	 ca	 ad	 D	 de
SHIFT <c>	ALT-SHIFT <c>	ALT-SHIFT <1>	SHIFT <d>	ALT-SHIFT <d>
ES1	E1	F1	FIS1	GES1
 ee	 E	 F	 fi	 ig
ALT-SHIFT <e>	SHIFT <e>	SHIFT <f>	ALT-SHIFT <f>	ALT-SHIFT <2>
G1	GIS1	AS1	A1	AIS1
 G	 go	 oh	 H	 hu
SHIFT <g>	ALT-SHIFT <g>	ALT-SHIFT <3>	SHIFT <h>	ALT-SHIFT <h>
Bb1	B1			
 ui	 I			
ALT-SHIFT <i>	SHIFT <i>			

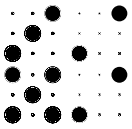
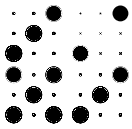
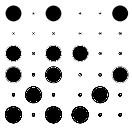
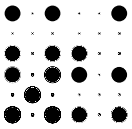
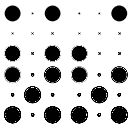
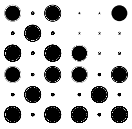
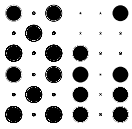
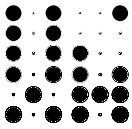
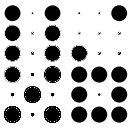
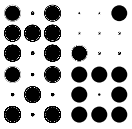
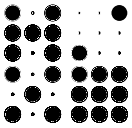
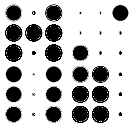
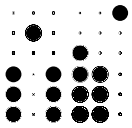
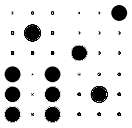
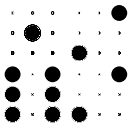
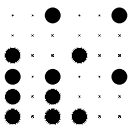
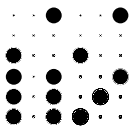
Sorry, in v1 of Leporellion MusicTypewriter (Regular/Standard) there was an Unicode conflict with the glyph „ig“ and the ALT-SHIFT-keying with numeric 2. The problems with the multiple assignment of quotes fixed with v2 of the MusicTypewriter 1 for Piano (a. Regular/b. Standard).

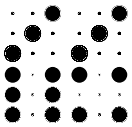
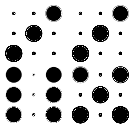
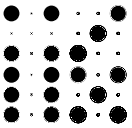
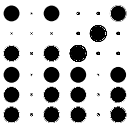
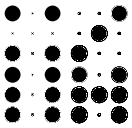
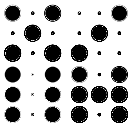
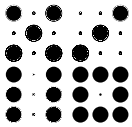
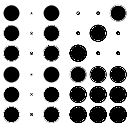
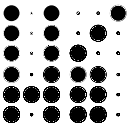
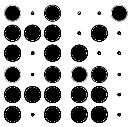
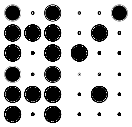
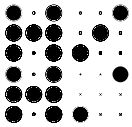
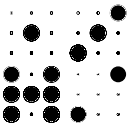
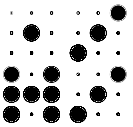
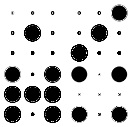
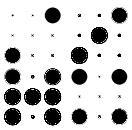
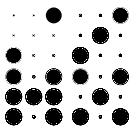
Big Octave (bass clef)				
C	CIS	DES	D	DIS
				
J	ja	ak	K	ke
SHIFT <j>	ALT-SHIFT <j>	ALT-SHIFT <4>	SHIFT <k>	ALT-SHIFT <k>
ES	E	F	FIS	GES
				
el	L	M	mi	in
ALT-SHIFT <l>	SHIFT <l>	SHIFT <m>	ALT-SHIFT <m>	ALT-SHIFT <5>
G	GIS	AS	A	AIS
				
N	no	oo	O	ou
SHIFT <n>	ALT-SHIFT <n>	ALT-SHIFT <6>	SHIFT <o>	ALT-SHIFT <o>
Bb	B			
				
up	P			
ALT-SHIFT <p>	SHIFT <p>			

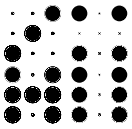
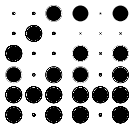
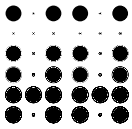
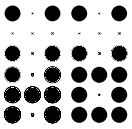
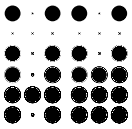
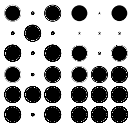
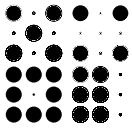
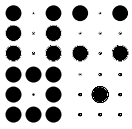
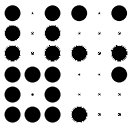
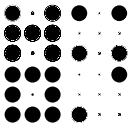
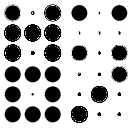
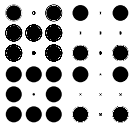
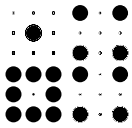
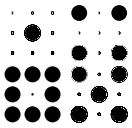
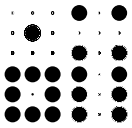
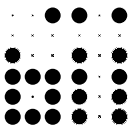
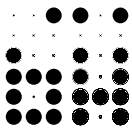
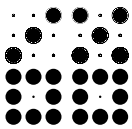
Small Octave (bass clef)				
c	cis	des	d	dis
				
Q	qua	ar	R	re
SHIFT <q>	ALT-SHIFT <q>	ALT-SHIFT <7>	SHIFT <r>	ALT-SHIFT <r>
es	e	f	fis	ges
				
es	S	T	ti	iu
ALT-SHIFT <s>	SHIFT <s>	SHIFT <t>	ALT-SHIFT <t>	ALT-SHIFT <8>
g	gis	as	a	ais
				
U	uo	ov	V	vu
SHIFT <u>	ALT-SHIFT <u>	ALT-SHIFT <9>	SHIFT <v>	ALT-SHIFT <v>
bb	b			
				
uw	W			
ALT-SHIFT <w>	SHIFT <w>			

One-line Octave (treble clef)

c1	cis1	des1	d1	dis1
				
X	xa	ay	Y	ye
SHIFT <x>	ALT-SHIFT <x>	ALT-SHIFT <0>	SHIFT <y>	ALT-SHIFT <y>
es1	e1	f1	fis1	ges1
				
ez	Z	a	ai	ib
ALT-SHIFT <z>	SHIFT <z>	<a>	ALT <a>	ALT <1>
g1	gis1	as1	a1	ais1
				
b	bo	oc	c	cu
<b>	ALT <b>	ALT <2>	<c>	ALT <c>
bb1	b1			
				
ud	d			
ALT <d>	<d>			

Two-line Octave (treble clef)				
c2	cis2	des2	d2	dis2
				
e	ea	af	f	fe
<e>	ALT <e>	ALT <3>	<f>	ALT <f>
es2	e2	f2	fis2	ges2
				
eg	g	h	hi	ii
ALT <g>	<g>	<h>	ALT <h>	ALT <4>
g2	gis2	as2	a2	ais2
				
i	io	oj	j	ju
<i>	ALT <i>	ALT <5>	<j>	ALT <j>
bb2	b2			
				
uk	k			
ALT <k>	<k>			

Three-line Octave (treble clef)				
c3	cis3	des3	d3	dis3
 l	 la	 am	 m	 me
<l>	ALT <l>	ALT <6>	<m>	ALT <m>
es3	e3	f3	fis3	ges3
 en	 n	 o	 oi	 ip
ALT <n>	<n>	<o>	ALT <o>	ALT <7>
g3	gis3	as3	a3	ais3
 p	 po	 oq	 q	 qu
<p>	ALT <p>	ALT <8>	<q>	ALT <q>
bb3	b3			
 ur	 r			
ALT <r>	<r>			

Four-line Octave (treble clef)				
c4	cis4	des4	d4	dis4
 s	 sa	 at	 t	 te
<s>	ALT <s>	ALT <9>	<t>	ALT <t>
es4	e4	f4	fis4	ges4
 eu	 u	 v	 vi	 iw
ALT <u>	<u>	<v>	ALT <v>	ALT <0>
g4	gis4	as4	a4	ais4
 w	 wo	 ox	 x	 xu
<w>	ALT <w>	ALT <ß>	<x>	ALT <x>
bb4	b4	c5		
 uy	 y	 z		
ALT <y>	<y>	<z>		

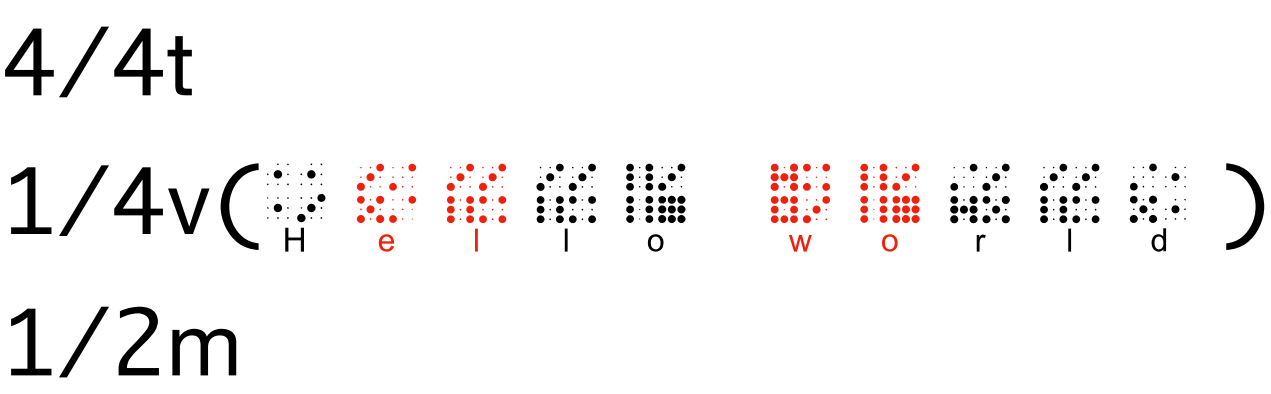
c. Working with Variables

We write in fractions (1/1, 1/2, 1/3, 1/4, 2/4, 3/4, 4/4, 1/8, 1/16 and so on) and Variables (v = note value, m= mute, t= tact-time) by using the non-binding format in another font (e.g. Arial, Helvetica New):

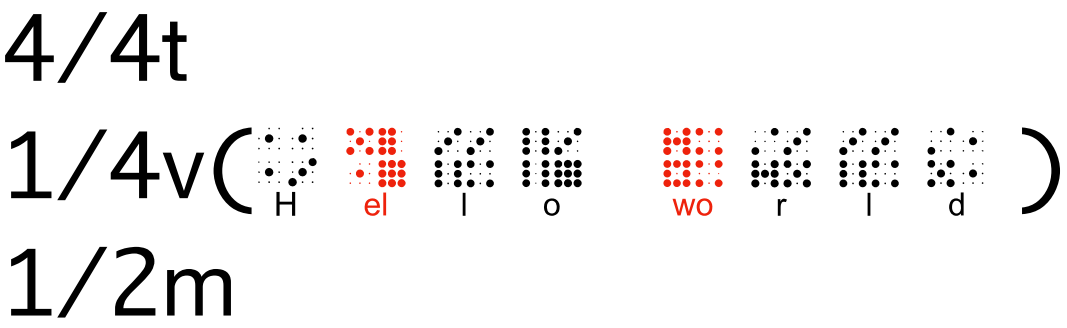
fraction.variable(t) fraction.variable(v).glyph1 (…) fraction.variable(m)

The points should be omitted. I nested glyphs in parenthesis (opening and ending brackets) because it allows shortened spelling. Then the music notation could look like this*:*

c1. Example by using upper and lower cases only:

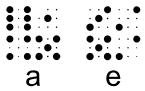
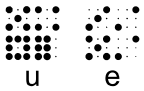
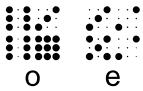
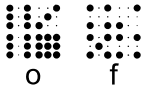
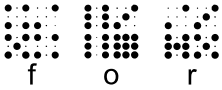
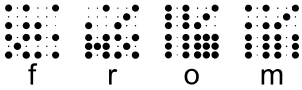
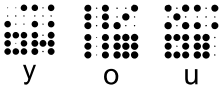
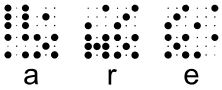
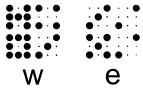
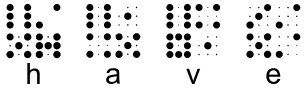
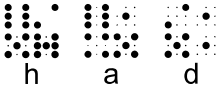
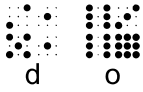
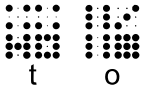
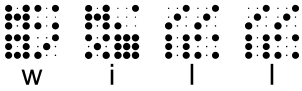
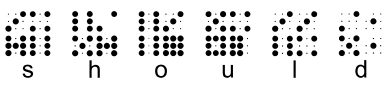
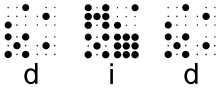
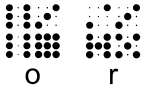
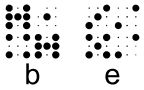
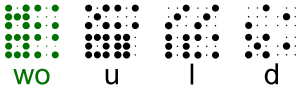
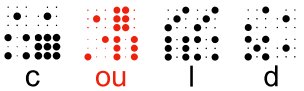
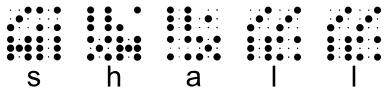


c2. Example by using consonantal pairs:



d. Working with chords

Instead of connecting staves we highlight the note glyphs in colors. We form chords for common words and syllables.

 ae	 ue	 oe
 of	 for	 from
 you	 are	 we
 have	 had	 -ed
 they	 them	 do
 and	 to	 will
 should	 did	 or
 -ing	 be	 would
 not	 could	 shall

1b // Another Introduction in the Law of Octaves by using a Standard formatting

e. Alternative Notation without consonantal keying

In this notation for Piano, we ignore the previously created consonantal Alphabet in LeporellionMusicTypewriter 1 (Regular), so that you can use LeporellionMusicTypewriter 1 (v2) in a alphanumeric formatting (Standard). All you need to do is change formatting of MusicTypewriter 1 from Regular to Standard.

Subcontra-Octave (bass clef)			
A2	AIS2	Bb2	B2
A2 01 SHIFT <a>	A2 02 ALT-SHIFT <a>	B2 02 ALT-SHIFT <b>	B2 03 SHIFT <b>

Contra-Octave (bass clef)				
C1	CIS1	DES1	D1	DIS1
C1 04 SHIFT <c>	C1 05 ALT-SHIFT <c>	D1 05 ALT-SHIFT <1>	D1 06 SHIFT <d>	D1 07 ALT-SHIFT <d>
ES1	E1	F1	FIS1	GES1
E1 07 ALT-SHIFT <e>	E1 08 SHIFT <e>	F1 09 SHIFT <f>	F1 10 ALT-SHIFT <f>	G1 10 ALT-SHIFT <2>
G1	GIS1	AS1	A1	AIS1
G1 11 SHIFT <g>	G1 12 ALT-SHIFT <g>	A1 12 ALT-SHIFT <3>	A1 13 SHIFT <h>	A1 14 ALT-SHIFT <h>
Bb1	B1			
B1 14 ALT-SHIFT <i>	B1 15 SHIFT <i>			

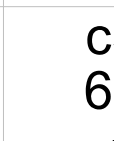
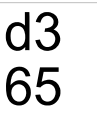
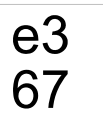
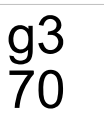
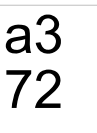
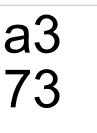
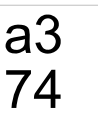
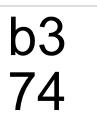
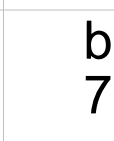
Sorry, but in v1 of Leporellion MusicTypewriter (Standard) there was also an Unicode conflict with the glyph via the ALT-SHIFT-keying with numeric 2. The problems with the multiple assignment of quotes fixed in v2 of the MusicTypewriter 1b (Standard).

Big Octave (bass clef)				
C	CIS	DES	D	DIS
C0 16 SHIFT <j>	C0 17 ALT-SHIFT <j>	D0 17 ALT-SHIFT <4>	D0 18 SHIFT <k>	D0 19 ALT-SHIFT <k>
ES	E	F	FIS	GES
E0 19 ALT-SHIFT <l>	E0 20 SHIFT <l>	F0 21 SHIFT <m>	F0 22 ALT-SHIFT <m>	G0 22 ALT-SHIFT <5>
G	GIS	AS	A	AIS
G0 23 SHIFT <n>	G0 24 ALT-SHIFT <n>	A0 24 ALT-SHIFT <6>	A0 25 SHIFT <o>	A0 26 ALT-SHIFT <o>
Bb	B			
B0 26 ALT-SHIFT <p>	B0 27 SHIFT <p>			

Small Octave (bass clef)				
c	cis	des	d	dis
c0 28 SHIFT <q>	c0 29 ALT-SHIFT <q>	d0 29 ALT-SHIFT <7>	d0 30 SHIFT <r>	d0 31 ALT-SHIFT <r>
es	e	f	fis	ges
e0 31 ALT-SHIFT <s>	e0 32 SHIFT <s>	f0 33 SHIFT <t>	f0 34 ALT-SHIFT <t>	g0 34 ALT-SHIFT <8>
g	gis	as	a	ais
g0 35 SHIFT <u>	g0 36 ALT-SHIFT <u>	a0 36 ALT-SHIFT <9>	a0 37 SHIFT <v>	a0 38 ALT-SHIFT <v>
bb	b			
b0 38 ALT-SHIFT <w>	b0 39 SHIFT <w>			

One-line Octave (treble clef)				
c1	cis1	des1	d1	dis1
c1 40 SHIFT <x>	c1 41 ALT-SHIFT <x>	d1 41 ALT-SHIFT <0>	d1 42 SHIFT <y>	d1 43 ALT-SHIFT <y>
es1	e1	f1	fis1	ges1
e1 43 ALT-SHIFT <z>	e1 44 SHIFT <z>	f1 45 <a>	f1 46 ALT <a>	g1 46 ALT <1>
g1	gis1	as1	a1	ais1
g1 47 <b>	g1 48 ALT <b>	a1 48 ALT <2>	a1 49 <c>	a1 50 ALT <c>
bb1	b1			
b1 50 ALT <d>	b1 51 <d>			

Two-line Octave (treble clef)				
c2	cis2	des2	d2	dis2
c2 52 <e>	c2 53 ALT <e>	d2 53 ALT <3>	d2 54 <f>	d2 55 ALT <f>
es2	e2	f2	fis2	ges2
e2 55 ALT <g>	e2 56 <g>	f2 57 <h>	f2 58 ALT <h>	g2 58 ALT <4>
g2	gis2	as2	a2	ais2
g2 59 <i>	g2 60 ALT <i>	a2 60 ALT <5>	a2 61 <j>	a2 62 ALT <j>
bb2	b2			
b2 62 ALT <k>	b2 63 <k>			

Three-line Octave (treble clef)				
c3	cis3	des3	d3	dis3
 <l>	 ALT <l>	 ALT <6>	 <m>	 ALT <m>
es3	e3	f3	fis3	ges3
 ALT <n>	 <n>	 <o>	 ALT <o>	 ALT <7>
g3	gis3	as3	a3	ais3
 <p>	 ALT <p>	 ALT <8>	 <q>	 ALT <q>
bb3	b3			
 ALT <r>	 <r>			

Four-line Octave (treble clef)				
c4	cis4	des4	d4	dis4
c4 76 <s>	c4 77 ALT <s>	d4 77 ALT <9>	d4 78 <t>	d4 79 ALT <t>
es4	e4	f4	fis4	ges4
e4 79 ALT <u>	e4 80 <u>	f4 81 <v>	f4 82 ALT <v>	g4 82 ALT <0>
g4	gis4	as4	a4	ais4
g4 83 <w>	g4 84 ALT <w>	a4 84 ALT <ß>	a4 85 <x>	a4 86 ALT <x>
bb4	b4	c5		
b4 86 ALT <y>	b4 87 <y>	c5 88 <z>		

f. Prospect of Leporellion Music Typewriter

I realize that the Leporellion Font Family turns the language world and font usage on its head. You are to accompany me on this project. I see no obstacles in turning dot stamping (VisualBraille) into a dit dah doh (NewMorse) to create an equivalent for drums and percussion. You may rely on Leporellion Music Typewriter II for Drums. But I also make mistakes – I am not a musician or professional typograph – and you help me to fix them.
In the long term, a stand-alone XML reference with HTML entities would be a far better solution to avoid the keyboard conflicts (Basic/Mac Latin; QWERTZ vs. QWERTY) and instability of developer tools. Stay tuned!