

# OCTALANG

🧑 Specification of a constructed language 🧑

Daniel Stribrand

OCTALANG is a constructed language which adopts every other language. It does this by converting a source text's characters' VALUES\* into octal numerals, where each digit corresponds to a LETTER in OCTALANG. Thus, OCTALANG inherits the source language's grammar and lexicon. Therefore, every language can be considered as a DIALECT of OCTALANG.

## Language

The alphabet in OCTALANG is an association between the digits in the octal numeral system and the LETTERS of OCTALANG.

Digit	Letter	IPA
0	ə	⟨u⟩
1	ø	⟨o⟩
2	o	⟨ɔ⟩
3	ô	⟨ɔ̃⟩
4	ô̇	⟨ɒ⟩
5	ô̈	⟨ɑ⟩
6	ê	⟨ä⟩
7	ổ	⟨a⟩

Table 1: OCTALANG's alphabet

LETTERS are organized into GROUPS by denoting enclosing brackets, semantically a GROUP corresponds to an octal numeral (and thus a character). A succession of non-separated GROUPS is called a LEXEME.

LEXEMES are separated with single SPLITS (/).

## Translating to and from Octalang

The translation to OCTALANG takes the following steps:

1. All non-alphanumeric characters from the source text are replaced with SPLITS.
2. Each symbol is converted into its VALUE as an octal numeral.
3. The numerals are translated into OCTALANG LETTERS and are GROUPED accordingly.
4. Preceding and succeeding SPLITS are removed, multiple SPLITS in succession are removed.

The translation from OCTALANG will naturally be the opposite procedure, though it will result in loss of information due to the homogeneous treatment of non-letters. SPLITS are commonly translated to spaces.

## FAQ<sup>†</sup>

- Is this really a language? Probably not, so do not think too much about it.
- How is this language useful? No idea.

---

\*In accordance to Unicode.

†No one has asked me anything.

## The English Octalang alphabet

As an example, we will show the English alphabet as represented in OCTALANG:

Upper	Octal value	Group	Lower	Octal value	Group
A	101	(oëo)	a	141	(oêo)
B	102	(oëo)	b	142	(oêo)
C	103	(oëô)	c	143	(oêô)
D	104	(oëê)	d	144	(oêê)
E	105	(oëê)	e	145	(oêê)
F	106	(oëê)	f	146	(oêê)
G	107	(oëê)	g	147	(oêê)
H	110	(oëo)	h	150	(oêo)
I	111	(oëo)	i	151	(oêo)
J	112	(oëo)	j	152	(oêo)
K	113	(oëô)	k	153	(oêô)
L	114	(oëê)	l	154	(oêê)
M	115	(oëê)	m	155	(oêê)
N	116	(oëê)	n	156	(oêê)
O	117	(oëê)	o	157	(oêê)
P	120	(oëo)	p	160	(oêo)
Q	121	(oëo)	q	161	(oêo)
R	122	(oëo)	r	162	(oêo)
S	123	(oëô)	s	163	(oêô)
T	124	(oëê)	t	164	(oêê)
U	125	(oëê)	u	165	(oêê)
V	126	(oëê)	v	166	(oêê)
W	127	(oëê)	w	167	(oêê)
X	130	(oëo)	x	170	(oêo)
Y	131	(oëo)	y	171	(oêo)
Z	132	(oëo)	z	172	(oêo)

Table 2: The English alphabet in OCTALANG.

### Hello World, as is tradition

Naturally, we will round off this specification with a traditional **Hello World** example:

(oëo)(oêê)(oêê)(oêê)(oêê)/(oëê)(oêê)(oêo)(oêê)(oêê)