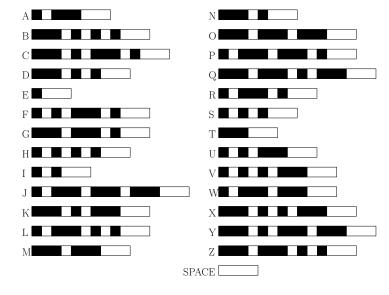
Lecture 2: Morse Code to Huffman Coding

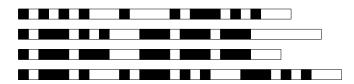
Lecturer: Travis Gagie

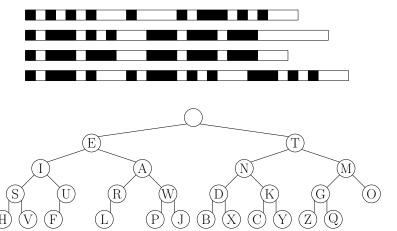
January 15th, 2015

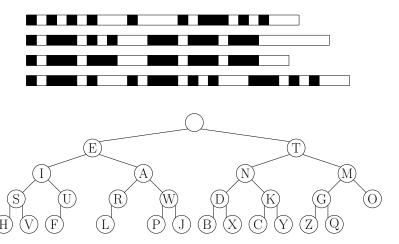
Morse Code

- 1. designed in the USA in the 1840s
- 2. redesigned in Germany a few years later
- 3. in common use for well over 100 years
- 4. uses dots, dashes and 3 lengths of pauses
- 5. assigns short codes for common characters, long codes for uncommon ones









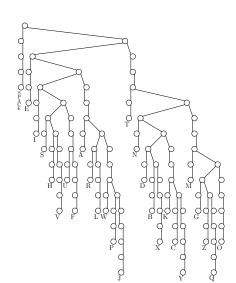
HELLO WORLD

Α	10111000	N	11101000
В	111010101000	Ο	11101110111000
C	11101011101000	Р	10111011101000
D	1110101000	Q	1110111010111000
Ε	1000	R	1011101000
F	101011101000	S	10101000
G	111011101000	Т	111000
Н	1010101000	U	1010111000
I	101000	V	101010111000
J	1011101110111000	W	101110111000
K	111010111000	X	11101010111000
L	101110101000	Υ	1110101110111000

Z 111011110101000

SPACE 0000

M 1110111000



"Improved" Morse

```
10110
                   Ν
                       11100
Α
   11101010
                       111111
В
                   0
   11101110
                       10111110
   1110100
                       11111011
D
                   Q
F
   100
                   R
                       1011100
   1010111
                   S
                       1010100
G
   1111100
                       110
Н
   10101010
                       1010110
                   U
   10100
                   V
                       10101011
    10111111
                  W
                       1011110
   1110110
K
                   Χ
                       11101011
   1011101
                   Υ
                       11101111
M
   11110
                   Z
                       11111010
              SPACE
                       0
```

