

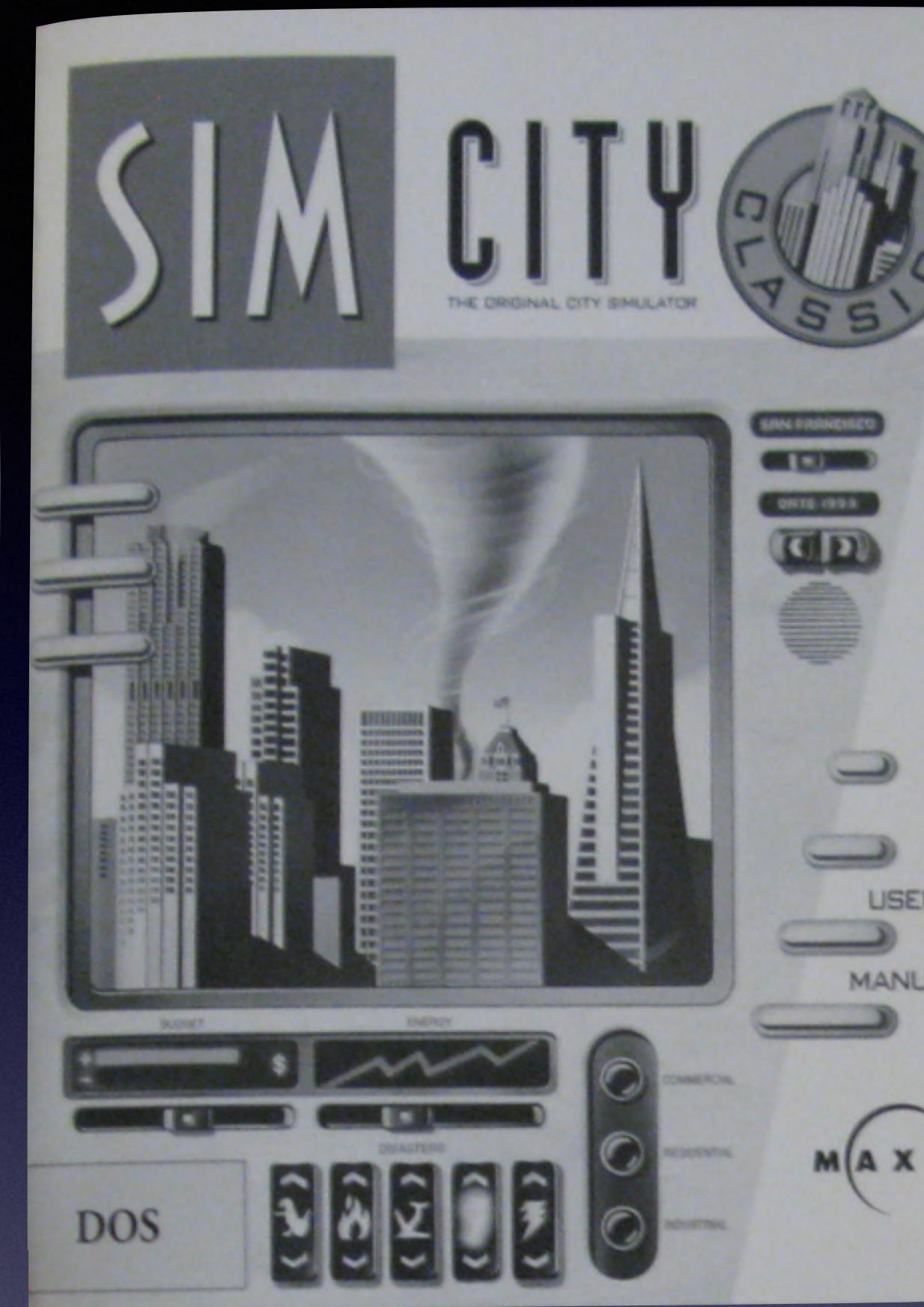
# LOCALIZATION IS HARD



BEFORE







**SIM CITY CLASSIC**

## SYSTEM INFORMATION

### HARDWARE REQUIRED

IBM PC, XT, AT, PS/1 PS/2 or 100% compatible computer  
640K RAM  
Hard disk required  
Supports VGA, EGA, MCGA and Hercules graphics  
Mouse, joystick, IBM or Epson printer optional  
Supports Ad Lib, Sound Blaster, Roland and most other major sound cards

### SOFTWARE REQUIRED

MS-DOS 3.3 or above  
SimCity Graphics™ Sets 1 and 2 optional

### INSTALLING AND STARTING SIMCITY CLASSIC

Before running SimCity, you must install it to your hard disk.

To install SimCity Classic:

1. Boot your computer.
2. Put Disk #1 in either your A or B floppy drive.
3. Type A: <Enter> or B: <Enter> depending on which drive you put the disk in.
4. At the prompt, type INSTALL <Enter>.
5. Follow the instructions on the screen.

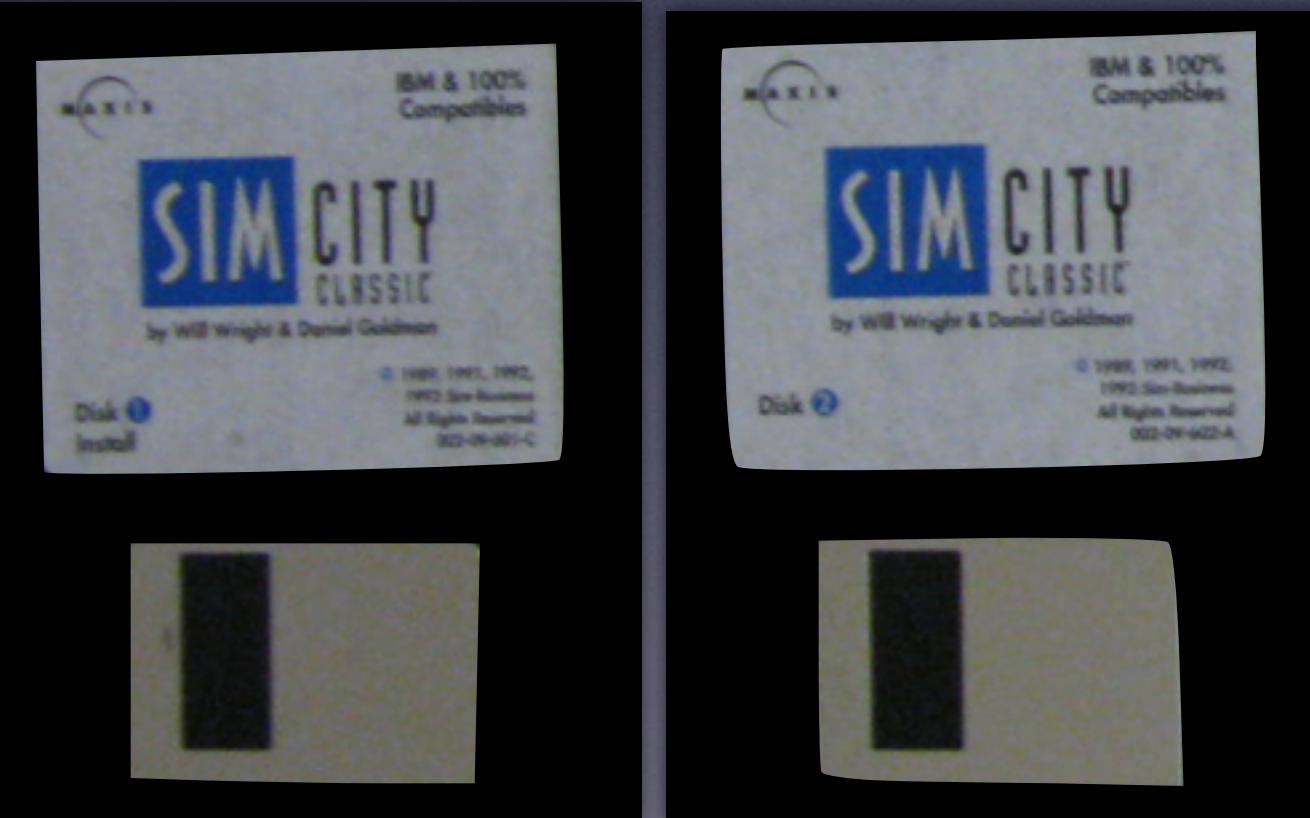
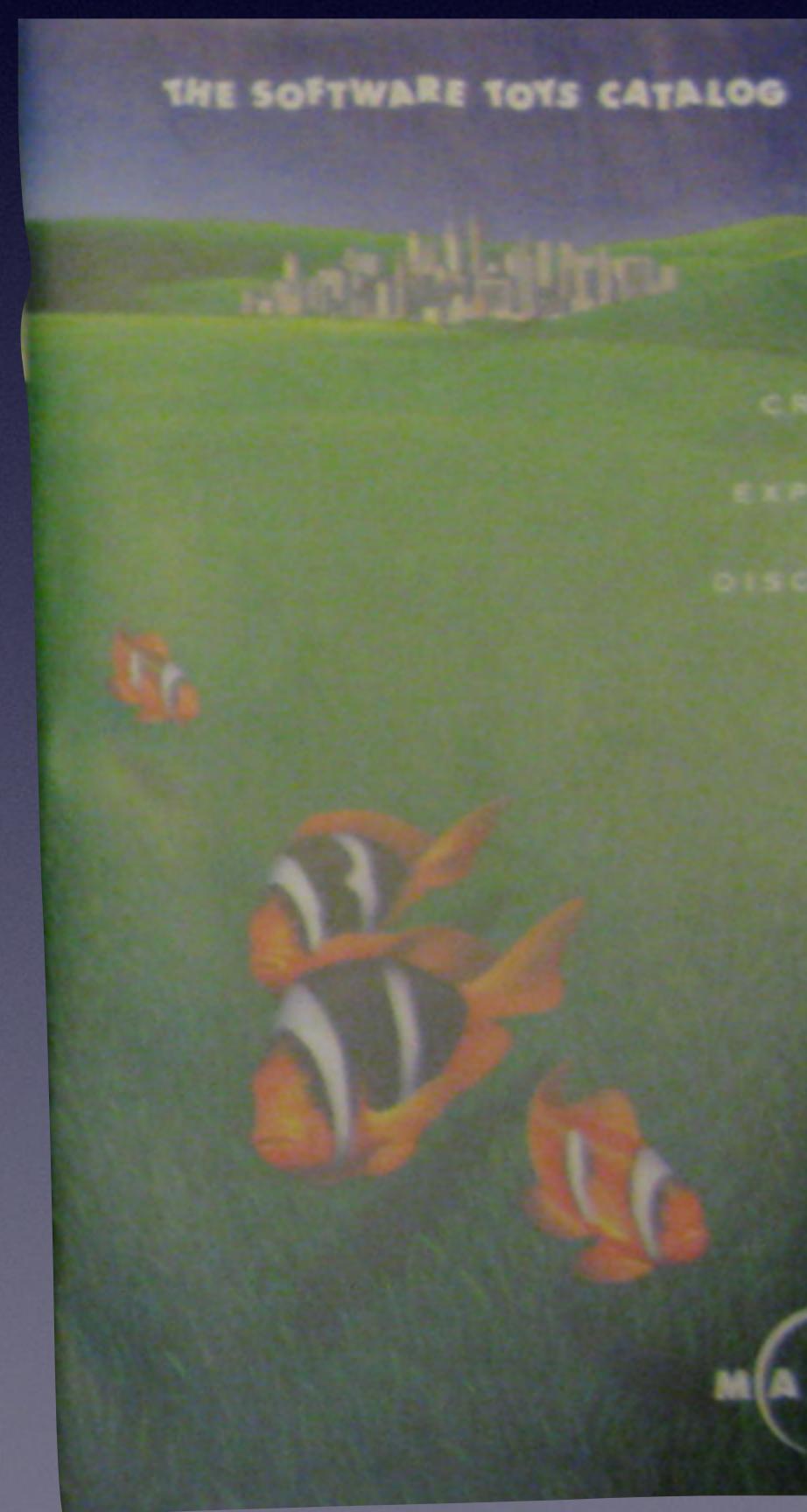
To start SimCity Classic:

1. Boot your computer.
2. Install a mouse driver if you are using a mouse.
3. Make sure you are in the SIMCITY directory.
4. Type SIMCITY <Enter>.

### NOTES

SimCity Classic comes on 3 1/2" disks. If you need 5 1/4" disks to run SimCity Classic on your computer, see the enclosed card for our FREE 5 1/4" disk offer.  
SimCity Classic includes a built-in Terrain Editor. You can access it by selecting Terrain in the Windows Menu. For complete details see the User Manual.  
The city data files for DOS, Windows, and both monochrome and color Macintosh are all compatible. We encourage you to upload your cities to bulletin boards and share them with other SimCitizens.

## SYSTEM INFO ADDENDUM REFERENCE CARD DOS VERSION



**Please fill in and return this card to Maxis, and you will:**

MAXIS

**SIMCITY CLASSIC™**  
REGISTRATION CARD

1. Become an all-around exceptional human being;
2. Become a Registered Owner of this Maxis product, entitling you to:
  - Free Technical Support, 2-year free replacement of defective media, and Low-cost updates and upgrades;
  - 3. Enter our weekly drawing to win Maxis games and accessories;
  - 4. Receive the Maxis Newsletter, filled with humor, contests, new product information, hints and tips about our games, and some darn good reading for the whole family; and
  - 5. Become rich and famous, maybe (and maybe not).

**IMPORTANT**

ALL INFORMATION IS CONFIDENTIAL. WE WILL NOT RELEASE YOUR NAME AND ADDRESS TO ANYONE FOR ANY REASON WITHOUT YOUR PERMISSION. IF YOU ARE INTERESTED IN FINDING OUT ABOUT OTHER PRODUCTS THAT WE THINK ARE WORTH LOOKING AT, CHECK THE BOX IN THE RETURN CARD BELOW. IF YOU DON'T CHECK THE BOX, WE WON'T GIVE OUT YOUR NAME NO MATTER HOW MUCH MONEY THEY OFFER US. WE WON'T TALK. THEY CAN TIE US UP AND TORTURE US, TAKE AWAY OUR COMPUTERS AND MAKE US LISTEN TO SIM FUNS FOR HOURS ON END—WE WON'T GIVE OUT YOUR PERSONAL INFO WITHOUT YOUR PERMISSION.

Disks Too Small?

**Maxis Maximus**

**The Maxis Guarantee**

We want you to be happy. We do our best to make software that is both fun and trouble-free, but, if there is a problem, let us know. If you are not completely satisfied with your purchase, for any reason, you may exchange it for a different Maxis Software Toy of equal or lesser value, or request a full cash refund. For return/exchange information, contact Maxis Customer Service or just send back the program with your dated sales receipt within 30 days of purchase and specify your choice of another Software Toy or cash. Dealers and Distributors are not eligible.

**Disk Warranty**

Maxis provides a 90-day limited warranty on the recording media. For disk replacement contact Maxis Customer Service or Technical Support.

**Maxis Customer Service**

For warranty disk replacement, return/exchange information, locations of nearest software retailers, catalog orders, direct order status, shipping information, or general stuff, contact Maxis Customer Service toll-free at: 1-800-336-2947 (1-800-33-MAXIS), 9-5 6:00am-6:00pm (Pacific Time). Fax 310-253-3738, or by mail at Maxis Customer Service, 2 Theatre Square, Redwood City, CA 94063-3348.

**Maxis Technical Support**

For technical questions dealing with hardware and software compatibility, startup problems, system errors or other unexplained phenomena, refer to your manual and address your query to Maxis Technical Support, 2 Theatre Square, Redwood City, CA 94063-3348.

# 2016



**INSTANT  
DISTRIBUTION**

# Unless processing

0.1 Prepare for Submission

Versions Prerelease Pricing In-App Purchases Game Center Reviews Newsstand More ▾

Builds Internal Testers External Testers

**i** To start testing, invite at least one tester.

Version 1.0 ? TestFlight Beta Testing ?

Build	Upload Date	Internal ?	External ?	Installations
1	Nov 22, 2014	Processing	Processing	

150+  
COUNTRIES

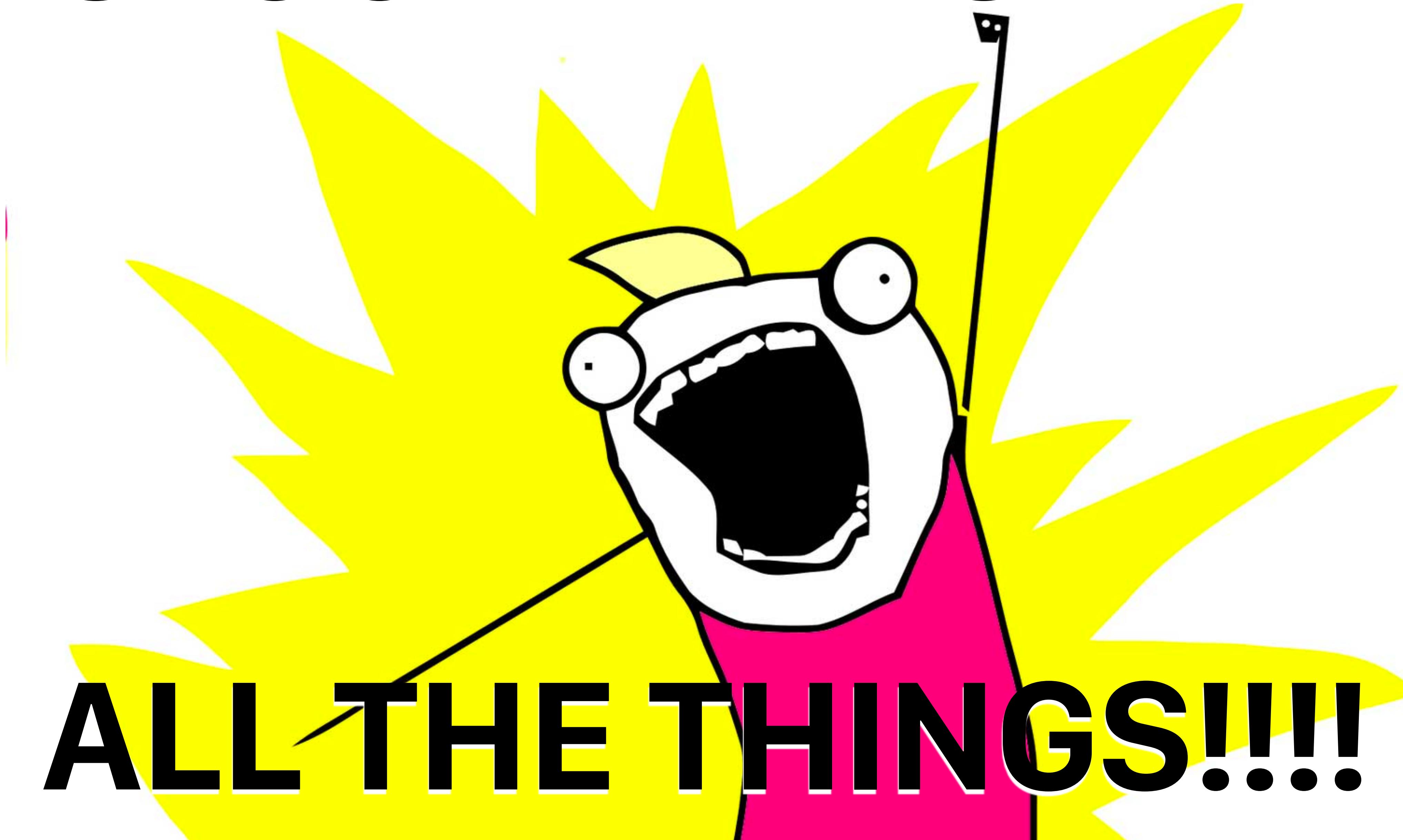
**RESPONSIBILITY +  
EXPECTATION**

**DOWNLOADS +  
PROMOTION**

?



# NSLOCALIZEDSTRING



**NOT ENOUGH**



# EXAMPLES

# PRACTICAL TIPS



A PLATE of all the  
**WORLD.**

Published by the Author in the French Royal  
Academy of Sciences, and sold by the Author

The author's signature



# Currency



```
let cash = 3.50
let cashString = String(format:
"€%.2f", arguments: [cash])
```

€3X50

3,50 €

# NSNumberFormatter

```
let numberFormatter = NSNumberFormatter()  
numberFormatter.numberStyle = .CurrencyStyle  
numberFormatter.currencyCode = "EUR"  
let cashString = numberFormatter.stringFromNumber(3.50)
```



# NSNumberFormatter

DecimalStyle

CurrencyStyle

PercentStyle

ScientificStyle

SpellOutStyle

OrdinalStyle

CurrencyISOCodeStyle

CurrencyPluralStyle

CurrencyAccountingStyle

**Use NSNumberFormatter every  
time you are including a Double  
or Float in a string**



A PLAT of all the  
**WORLD.**

Published by J. & C. Rivington, 1689.

The world's first map.

Señor Estruñon Meléndez



# Long Words

# Rindfleischetikettier ungsueberwachungs aufgabenuebertragu ngsgesetz

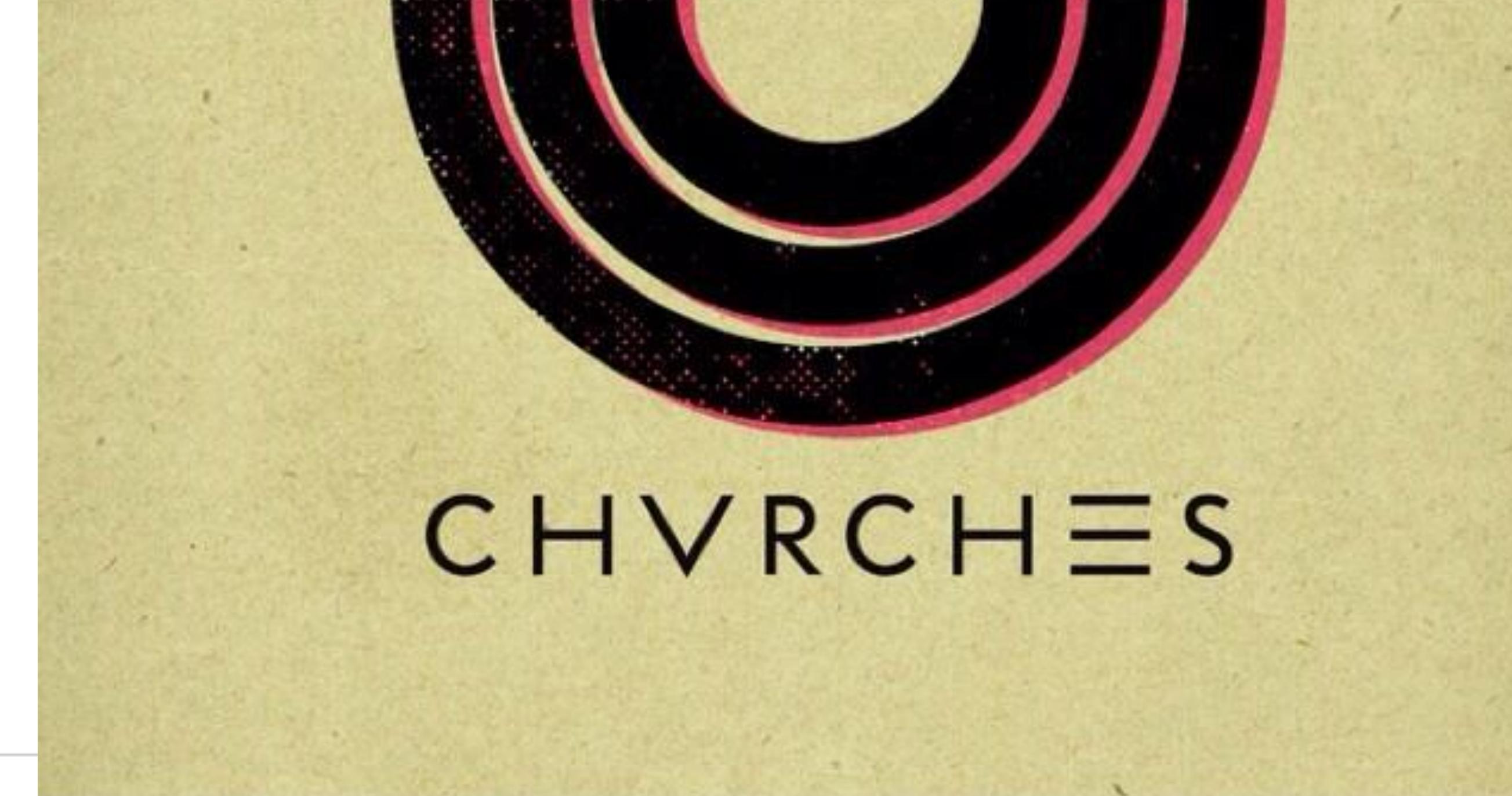
01 : 48

Timer-Ende

Wiedergabe stoppen >

Abbrechen

Anhalten

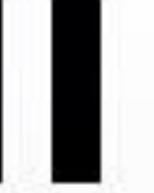


1:48

-2:03

Gun

CHVRCHES - Gun - Single



Interpret wiederholen Neu

Alle zufällig

 **Build**  
2 targets

 **Run**  
Debug

 **Test**  
Debug

 **Profile**  
Release

 **Analyze**  
Debug

 **Archive**  
Release

Info

Arguments

Options

Diagnostics

Core Location  Allow Location Simulation

Default Location

Application Data

Routing App Coverage File

Background Fetch  Launch due to a background fetch event

Localization Debugging  Show non-localized strings

Application Language  System Language

Application Region

XPC Service

Right to Left Pseudolanguage

View Debugging  Enable user interface debugging

Queue Debugging  Enable backtrace recording

Duplicate Scheme

Manage Schemes...

Shared

Close

**Mock up UI by doubling all  
strings. Auto layout helps.**



A PLATE of all the  
**WORLD.**

Published by the Author in the French Royal  
Academy of Sciences, and sold by the Author

in Paris.

1689.

The author's name is not mentioned in the title or text.



# Capitalization

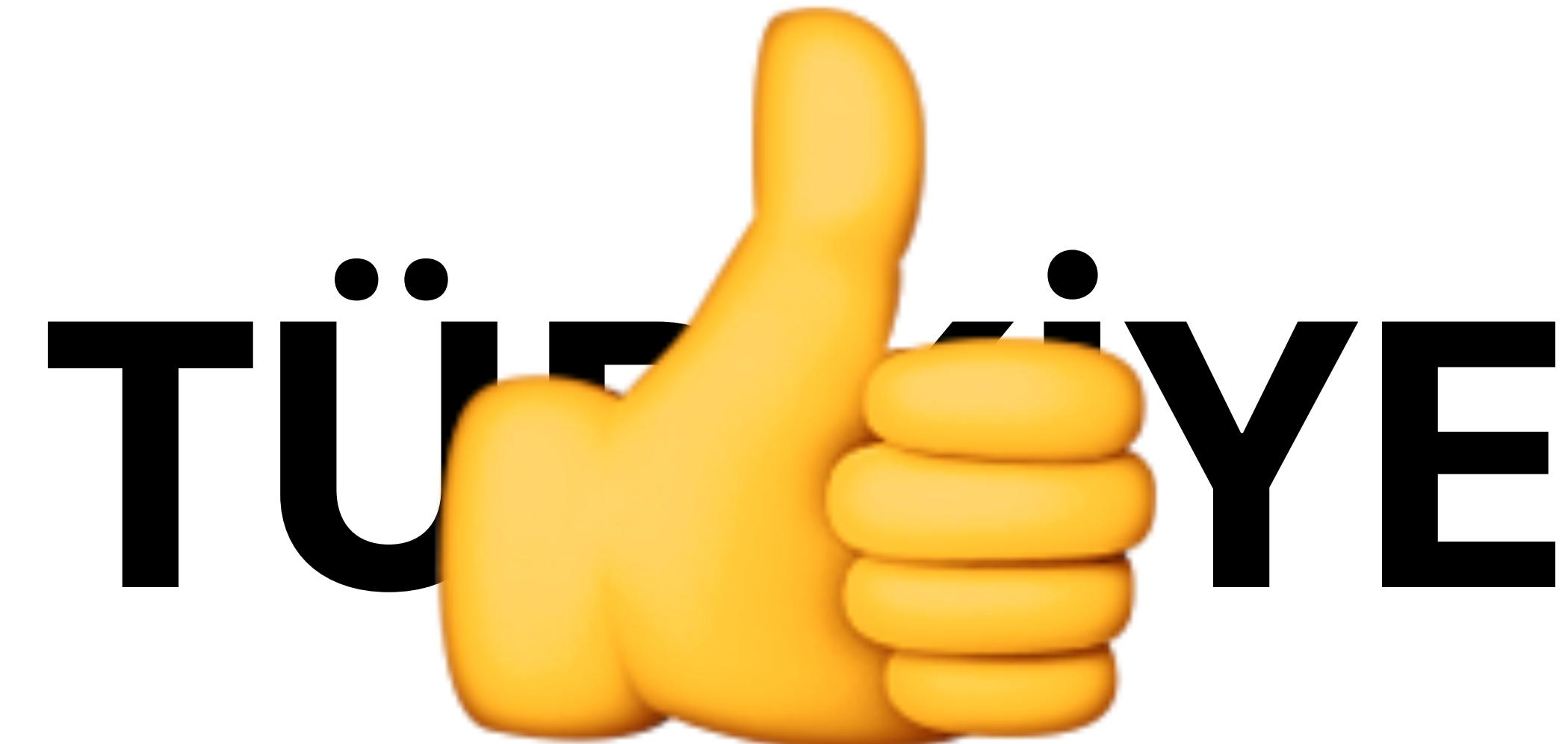
```
let turkey = "Türkiye"  
let TURKEY = turkey.uppercaseString
```

TÜR~~X~~İYE

TÜRKİYE

**.localizedUppercaseString  
(iOS9+)**

```
let turkey = "Türkiye"  
let TURKEY =  
turkey.localizedUppercaseString
```



`.uppercaseStringWith  
Locale()  
(iOS6+)`

`localizedUppercaseString()`  
`localizedLowercaseString()`  
`localizedCapitalizedString()`

**When changing string capitalization, always use the localized variation**



A PLAT of all the  
**WORLD**.

Projected by orders of the Royal Society  
and published at their charge by Robert Mallett  
Printer to the Society, 1700.

London: Printed for the Society by R. Mallett.

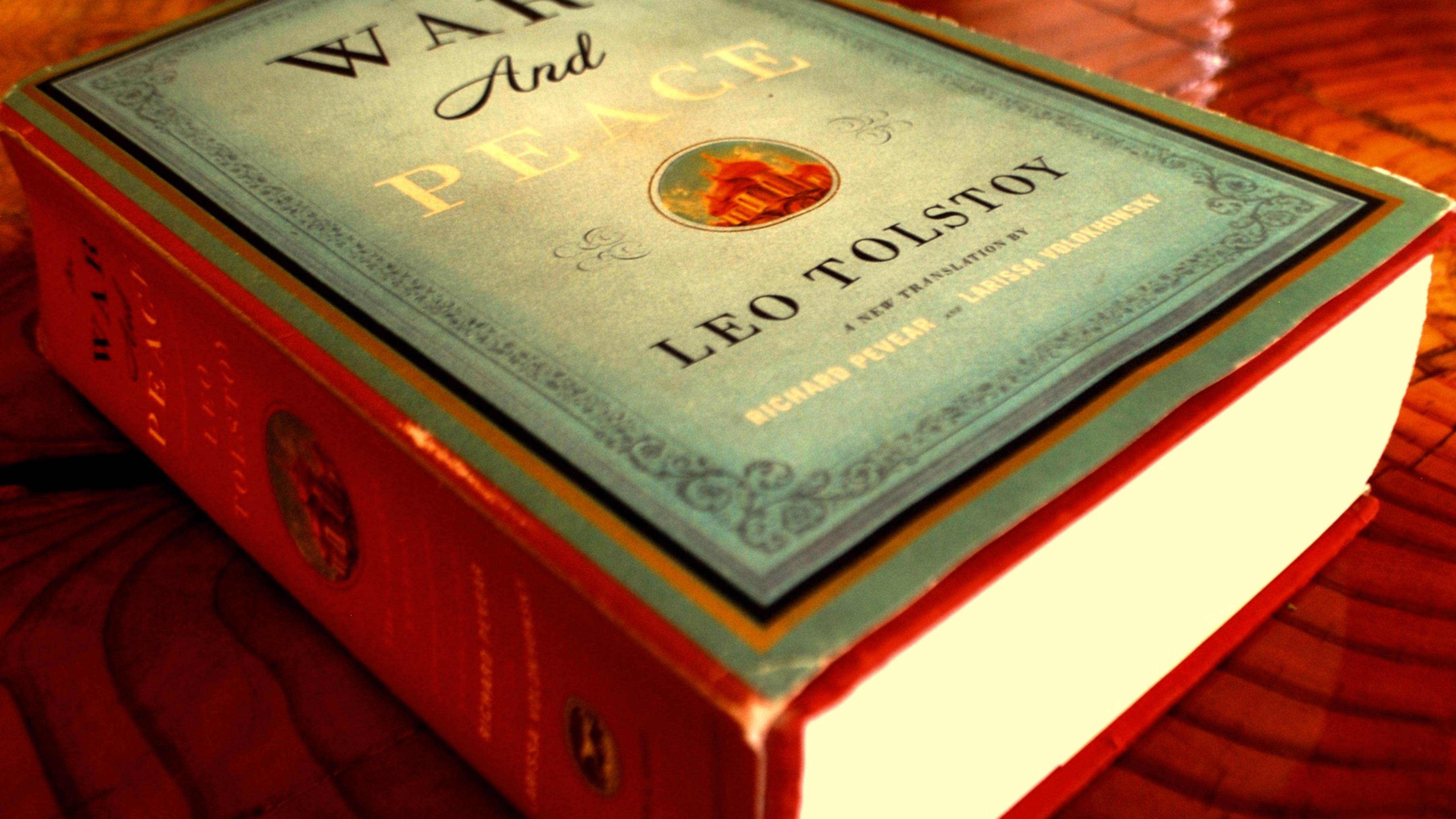
W A R  
And  
PEACE



LEO TOLSTOY

A NEW TRANSLATION BY

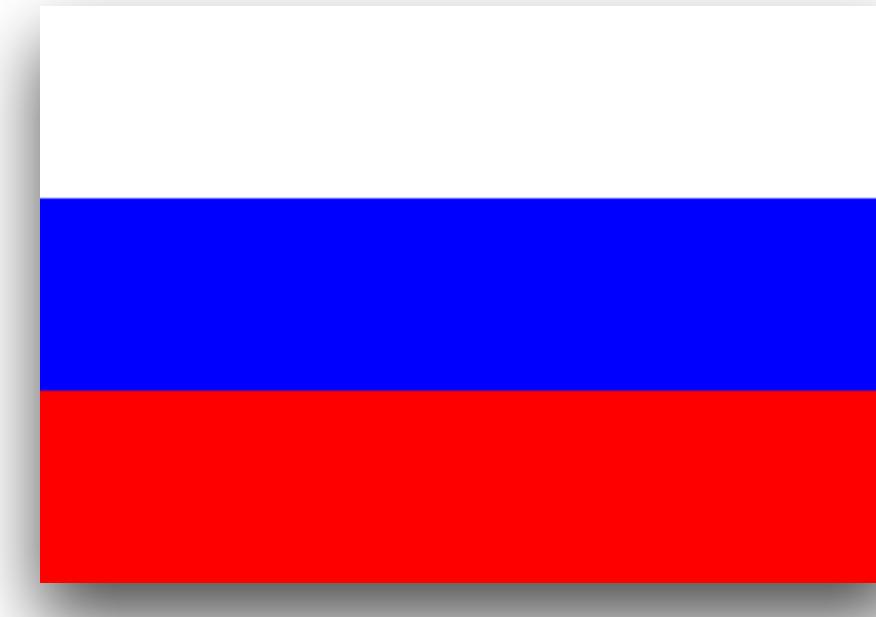
RICHARD PEVEAR AND LARISSA VOLOKHOVSKY



# Plurals

```
if n == 1 {  
    secondString = "\n) second"  
}  
else {  
    secondString = "\n) seconds"  
}
```

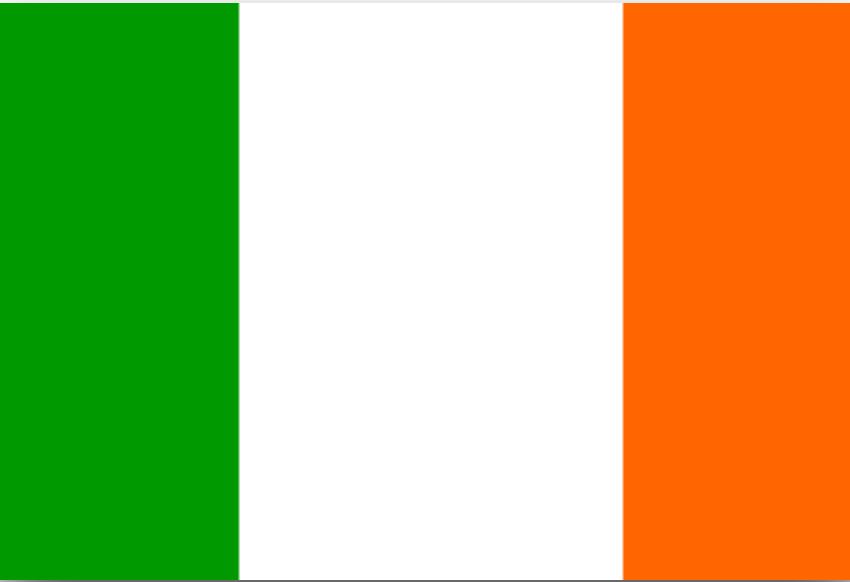




**ends in 1, excluding 11:** 1, 21, 31, 41, 51, 61, 71, 81,  
91, 101, 121 ...

**ends in 2–4, excluding 12–14:** 2, 3, 4, 22, 23, 24, 32,  
33, 34, 42 ...

**everything else:** 0, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,  
15, 16, 17 ...



```
is 1: 1
is 2: 2
is 3-6: 3, 4, 5, 6
is 7-10: 7, 8, 9, 10
everything else: 0, 11, 12, 13, 14, 15, 16, 17, 18, 19,
20, 21, 22, 23 ...
```

**.stringsdict  
(iOS7+)**

```
<plist version="1.0">
  <dict>
    <key>dot.swift.plural</key>
    <dict>
      <key>NSStringLocalizedFormatKey</key>
      <string>%#@items@</string>
      <key>items</key>
      <dict>
        <key>NSStringFormatSpecTypeKey</key>
        <string>NSStringPluralRuleType</string>
        <key>NSStringFormatValueTypeKey</key>
        <string>d</string>
        <key>one</key>
        <string>Установ. для %d выбранных друзей</string>
        <key>few</key>
        <string>Установ. для %d выбранных друзей</string>
        <key>other</key>
        <string>Установ. для %d выбранных друзей</string>
      </dict>
    </dict>
  </dict>
</plist>
```

One, two, few, many,  
other

```
let localizedString = NSLocalizedString("dot.swift.plural",  
comment: "Установ. для %d выбранных друзей")  
let pluralString =  
String.localizedStringWithFormat(localizedString, [number])
```



**Use `.stringsdict` for plural  
localized strings.**





# Address

Roy Marmelstein

The Stage

Dot.Swift

Théâtre des Variétés

8 boulevard Montmartre

75002 Paris

France



75002 Paris  
8 boulevard Montmartre  
Théâtre des Variétés  
Dot.Swift  
The Stage  
Roy Marmelstein



# CNPostalAddressFormatter (iOS9+)

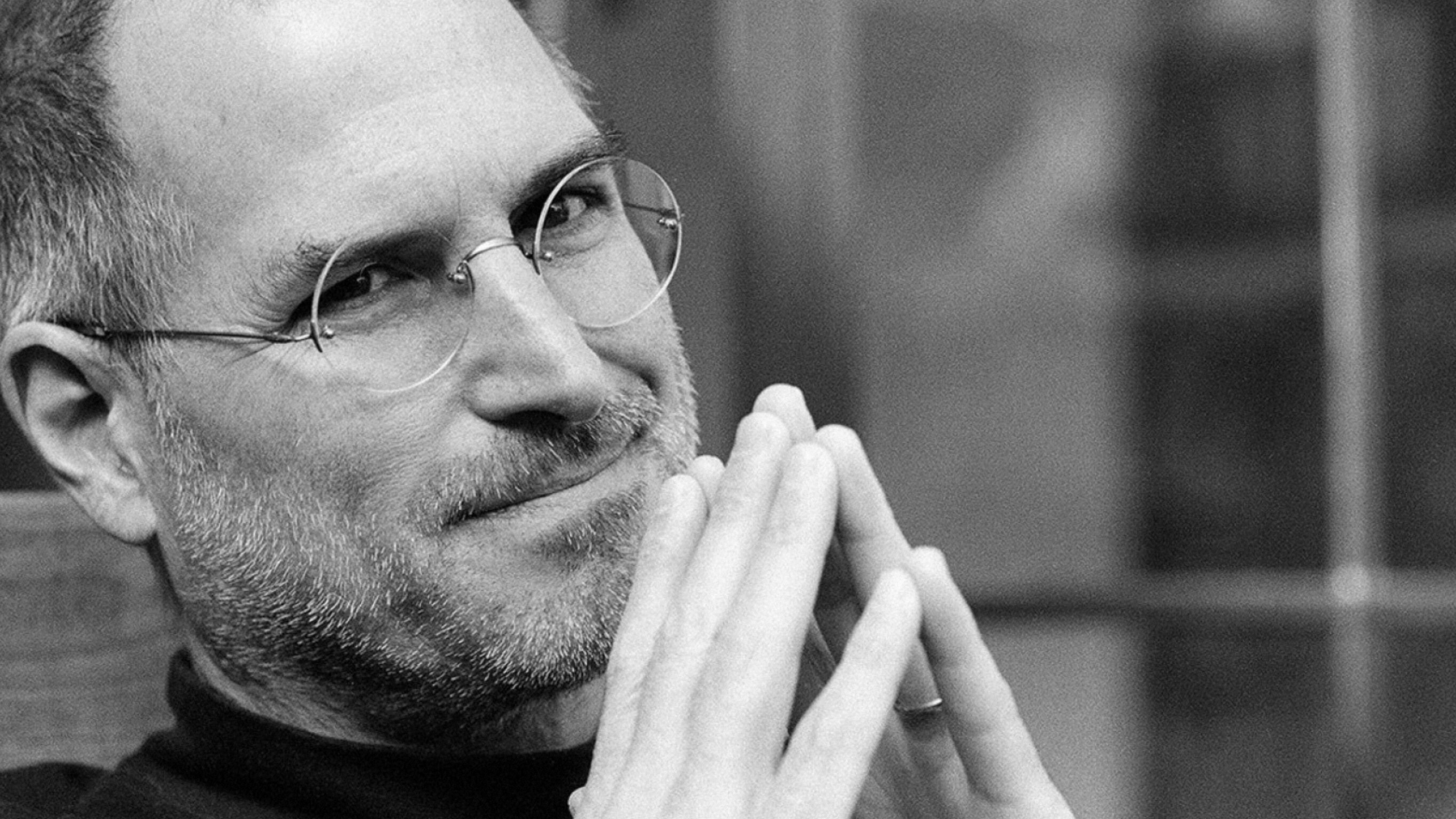
```
let postalFormatter = CNPostalAddressFormatter()
let postalAddress = CNMutablePostalAddress()
postalAddress.street = "8 boulevard Montmartre"
postalAddress.city = "Paris"
postalAddress.state = "Ile de France"
postalAddress.postalCode = "75002"
postalAddress.country = "France"
postalAddress.ISOCountryCode = "FR"
let addressString =
postalFormatter.stringFromPostalAddress(postalAddress)
```

**Address formatter is hidden in  
Contacts. Use it when  
displaying addresses.**



A PLATE of all the  
**WORLD.**

Published by the Author in the Year of our Lord  
1689. By J. & C. K. for the Author.

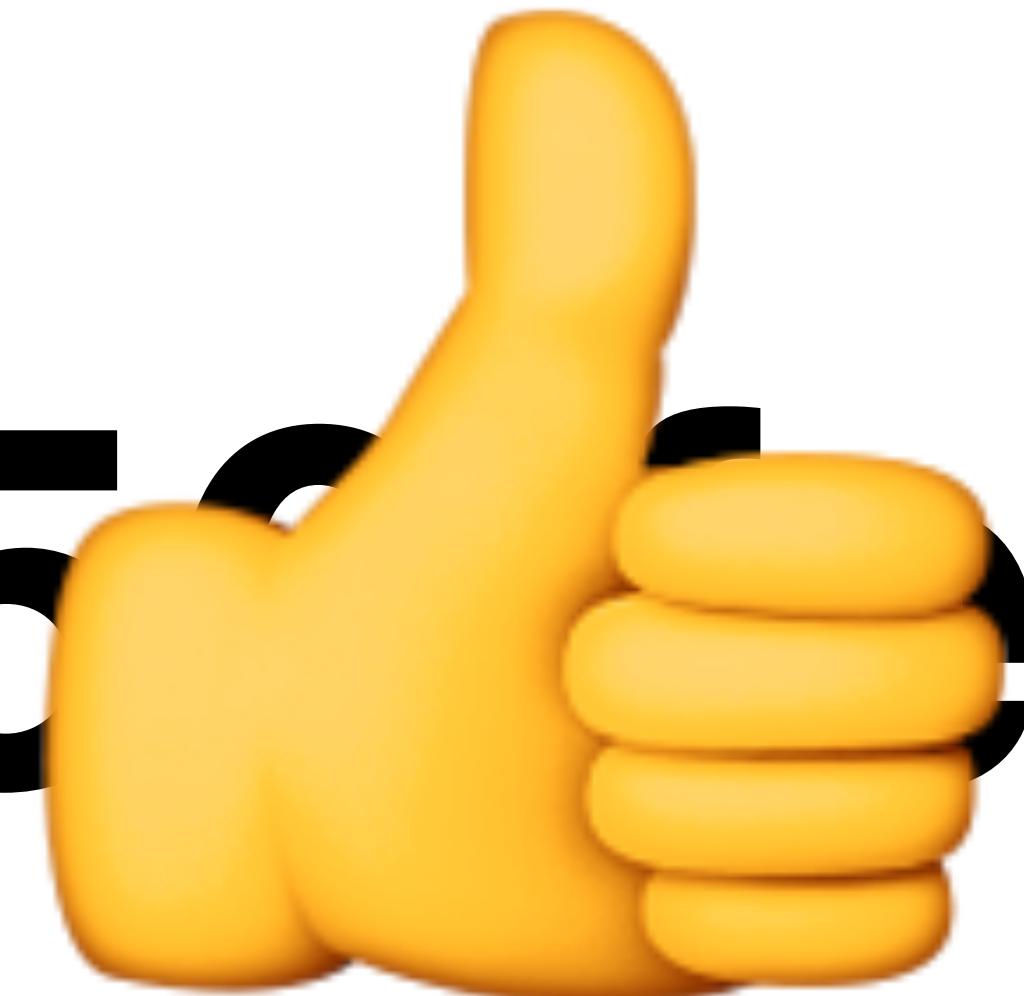


**Distance + weight**

Inch, foot, yard, mile.  
Ounce, pound.

# MKDinstanceFormatter

```
let distance: CLLocationDistance = 100.0 // in Meters
let distanceFormatter = MKDistanceFormatter()
let localDistance =
    distanceFormatter.stringFromDistance(distance)
```

350 feet 

# NSMassFormatter

```
let weight = 66.0 // in Kg  
let massFormatter = NSMassFormatter()  
massFormatter.forPersonMassUse = true  
let localWeight =  
massFormatter.stringFromKilograms(weight)
```

14<sup>7</sup>/<sub>11</sub> lb 

**Distance formatter is hidden in  
MapKit. NSMassFormatter can  
handle all weights.**



# DIDN'T DISCUSS

Left to right. Better with iOS9.  
A lot of work.

# WHAT'S MISSING

- Gender
- Combination locales / phone
- Misc differences (Chinese - no initials, French " !")
- NS~

NS

=

Not Swift-y

github.com/marmelroy/Format

github.com/marmelroy/  
Localize-Swift/

# THE BIG PICTURE

# Test Driven Development

Localization  
Driven  
Development





@marmelroy