



# **SAVING WORLD LANGUAGES** USING ... **LOGOGRAMS**

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# A WORLD WITH ONE LANGUAGE IS IMPOSSIBLE



- In his speech at the UNESCO Headquarters in March 2014, Chinese President Xi Jinping pointed out: *"It's impossible to imagine a world with only one life style, **one language**, one type of music, and one clothing style."* *"Civilizations are **multi-colored**. The value of human civilizations concerning exchange and mutual learning lies in its very diversity."*

# YET, YET! MANY (MINOR) LANGUAGES ARE DISAPPEARING

- There are approximately 7,000 **living** languages today (2,300 of which in Asia)
- Only about **3%** of the world's population accounts for **96%** of all languages spoken today.
- Out of all languages in the world, **2,000** have fewer than **1,000** native speakers.
- About 50% of today's languages will be **dead** by 2050

# WHAT HAPPENS WHEN A LANGUAGE DISAPPEARS?

- **We lose** "The **expression of a unique vision** of what it means to be human"  
- "Each language is a key that can unlock local knowledge about medicinal secrets, ecological wisdom, weather and climate patterns, spiritual attitudes and artistic and mythological histories."
- **We lose memory of the planet's** many histories and cultures.
- **We lose** some of the **best local resources** for combatting environmental threats - "Medical science loses potential cures; resource planners and national governments lose accumulated wisdom regarding the management of marine and land resources in fragile ecosystems."
- **Some people lose** their **mother tongue**. - The real tragedy of all this might just be all of the people who find themselves unable to speak their first language, the language they learned how to describe the world in.
- We all **lose COLORS**

# 1 LANGUAGE, 1 CULTURE





# SEVERAL LANGUAGES, SEVERAL CULTURES



**1 LANGUAGE  
1 CULTURE  
CULTURES**

**SEVERAL LANGUAGES  
SEVERAL**



# WHY DOES A LANGUAGE DISAPPEAR?

- Because native speakers die (**and stop using it**)
- Because, for whatever – “practical” – reason, bilingual people start giving priority to their other language (and gradually forget it, **and stop using it**)
- Because children are made to **feel shameful and inferior** about the native language of their parents and grandparents (**and stop using it**)
- Because many states force their citizens to communicate with them in the official language so such citizens realize that their language is **inferior and not wanted** (**and stop using it**)



**WHY DOES A LANGUAGE DISAPPEAR?**

**... AND STOP USING  
IT**

# WHAT IS THE REMEDY?

- Make sure that people of all ages continue using their **common – “non official”/“minority” – language** in all aspects of their daily lives
- Make sure that people of all ages can also **use their own language** when communicating with their central government or with people speaking another language, without using google translate (**far from perfect** and **not available** anyway for most endangered languages)
- Make it possible for **speakers of “minor” languages** to access everything the internet has to offer

# WHAT IS THE REMEDY?

- Offer to all languages the possibility to be written using the same **language-independent** code
- Offer to speakers of all languages the possibility to **communicate directly** without having to use a human translator or a translation application, nor a lingua franca or a **dominant** language they don't fully master
- Allow all speakers, whatever their mother tongue, to be on **equal linguistic footing** when communicating with people speaking another language (indigenous/local languages **no longer made to feel inferior** to dominant languages)

# WHAT WOULD BE THE BEST TOOL?

Resort to

- The **oldest** continuously used system of writing in the world,
- The **most widely** adopted writing systems in the world by number of users
- The **only** modern language **using logograms** (that represent words/phrases - the first historical civilizations of the Near East, Africa, China, and Central America used some form of logographic writing).
- **CHINESE CHARACTERS**

# WHAT WOULD BE THE BEST TOOL?



手/ shǒu / hand; 洗 / xǐ / wash

(in the Japanese example above (o tearai), no idea what the hiragana character was, all I knew was the 2 Chinese logograms (shou=hand; xi=wash), no idea what Japanese speakers would say, but the meaning was still obvious)



# WHAT WOULD BE THE BEST TOOL?



出口/ chūkō /  
exit; 入口/  
rūkō /  
entrance

# WHAT WOULD BE THE BEST TOOL?



開 (traditional characters) or 开 (simplified character) kāi (mén) / open (the door) & 閉 or 闭 / bì (mén) / close (the door)

# WHAT WOULD BE THE BEST TOOL?

五 / "5"



# WHAT WOULD BE THE BEST TOOL?



大 / large  
小 / small

# WHAT WOULD BE THE BEST TOOL?

- **Logograms** (graphemes) are **not linked** directly to their **pronunciation**.
- **Understanding the pronunciation or language of the writer** is unnecessary, e.g. **3** (number three) is understood regardless of whether it be called *three*, *drei*, *trois*, *tres* or *san* by its reader.
- In China, Vietnam, Korea, and Japan (4 different families of languages: Sino-Tibetan, Austroasiatic, Koreanic, Japonic) prior to modern times, **communication by writing** (筆談 / **bǐtán**) **was the norm** of East Asian international trade and diplomacy.



# WHAT WOULD BE THE BEST TOOL?



And we would avoid translation mistakes like this one

**INGREDIENTS** Toasted flakes of golden corn.  
**INGREDIENTS:** Maize, Sugar, **Barley** malt flavouring, Salt.  
**VITAMINS & MINERALS:** Niacin, Iron, Vitamin B6, Vitamin B2(Riboflavin), Vitamin B1(Thiamin), Folic acid, Vitamin D, Vitamin B12.  
 For allergens see ingredients highlighted in bold.  
 Best before: see top.

الوزن الصافي ٢٤ جم  
 وزن خالص **24ge**

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	○ 100g (%RI*) لكل 100 غ	○ 24g (%RI*) لكل 24 غ
ENERGY / ENERGIE / VALORE ENERGETICO / VALOR ENERGÉTICO / ENERGIA / الطاقة / (كيلو جول / كيلو كالوري) / انرژی / ENERGEIA	1604kJ 378kcal	385kJ 91kcal (5)
FAT / MATIÈRES GRASSES / VETTEN / GRASSI / GRASAS / LÍPIDOS / (دهن / λίπη) / چربی / of which saturates / dont acides gras saturés / waarvan verzadigde vetzuren / di cui saturi / de las cuales saturadas / dos quais saturados / (منها مشبع / εκ των οποίων κορεσμένα) / چربی اشباع / ΥΔΑΤΟΓΕΝΕΣ / KARBONHYDRATE / GLUCIDES / KOOLHYDRATEN / CARBOIDRATI / HIDRATOS DE CARBONO / (كربوهيدرات / γλυκά) / كربوهیدرات / of which sugars / dont sucres / waarvan suikers / di cui zuccheri / de los cuales azúcares / dos quais açúcares / (منها سكر / εκ των οποίων σάκχαρα) / قند / FIBRE / FIBRES ALIMENTAIRES / VEZELS / FIBRA ALIMENTARIA / FIBRA / (ألياف غذائية / φυτικές ίνες) / فايبر / PROTEIN / PROTÉINES / EIWITTEN / PROTEINE / PROTEÍNAS / (بروتين / πρωτεΐνες) / پروتئين / SALT / SEL / ZOUT / SALE / SAL / (ملح / αλάτι) / نمک	0.9g 0.2g	0.2g (<1) 0.05g (<1)
CARBOHYDRATE / GLUCIDES / KOOLHYDRATEN / CARBOIDRATI / HIDRATOS DE CARBONO / (كربوهيدرات / γλυκά) / كربوهیدرات	84g	20g
of which sugars / dont sucres / waarvan suikers / di cui zuccheri / de los cuales azúcares / dos quais açúcares / (منها سكر / εκ των οποίων σάκχαρα) / قند	8g	1.9g (2)
FIBRE / FIBRES ALIMENTAIRES / VEZELS / FIBRA ALIMENTARIA / FIBRA / (ألياف غذائية / φυτικές ίνες) / فايبر	3g	0.7g
PROTEIN / PROTÉINES / EIWITTEN / PROTEINE / PROTEÍNAS / (بروتين / πρωτεΐνες) / پروتئين	7g	1.7g
SALT / SEL / ZOUT / SALE / SAL / (ملح / αλάτι) / نمک	1.13g	0.27g (5)
VITAMINS / VITAMINES / VITAMINEN / VITAMINE / VITAMINAS / (فيتامينات / βιταμίνες) / ویتامینها / BITAMINES		
VITAMIN D / D / VITAMINA D / (د(مگ)) / BITAMINH D / D / ویتامین D / D	8.4µg (167)	2.0µg (40)
THIAMIN (B1) / THIAMINE (B1) / B1 / TIAMINA (B1) / (ب1 مگ) / ΘΕΙΑΜΙΝΗ (B1) / (B1) / تیامین	0.91mg (83)	0.22mg (20)
RIBOFLAVIN (B2) / RIBOFLAVINE (B2) / B2 / RIBOFLAVINA (B2) / (ب2 مگ) / ΡΙΒΟΦΛΑΒΙΝΗ (B2) / (B2) / ریبوفلاβιν	1.2mg (83)	0.28mg (20)
NIACIN / NIACINE (B3/PP) / NIACINA / (ب3 مگ) / ΝΙΑΣΙΝΗ / (B3) / نیاسین	13.3mg (83)	3.2mg (20)
VITAMIN B6 / B6 / VITAMINA B6 / (ب6 مگ) / ΒΙΤΑΜΙΝΗ B6 / B6 / ویتامین B6 / B6	1.2mg (83)	0.28mg (20)
FOLIC ACID / ACIDE FOLIQUE (B9) / FOLIUMZUUR / ACIDO FOLICO / ÁCIDO FÓLICO / (ب9 مگ) / حمض الفوليك (ب9) / ΦΥΛΛΙΚΟ ΟΞΥ / اسید فولیک	166µg (83)	40.0µg (20)
VITAMIN B12 / B12 / VITAMINA B12 / (ب12 مگ) / ΒΙΤΑΜΙΝΗ B12 / B12 / ویتامین B12 / B12	2.1µg (83)	0.50µg (20)
MINERALS / SELS MINÉRAUX / MINERALEN / MINERALI / MINERALES / MINERAIS / معادن / ΜΕΤΑΛΛΑ / مواد معدنی		
IRON / FER / IJZER / FERRO / HIERRO / (حديد / σίδηρος) / آهن	8.0mg (57)	2.0mg (14)

\*Reference intake of an average adult (8400kJ/ 2000kcal) / \*Apport de Référence pour un adulte-type (8400kJ/ 2000kcal) / \*Referentie Inname van een gemiddelde volwassene (8400kJ/2000kcal) / \*Assunzioni di riferimento di un adulto medio (8400kJ/ 2000kcal) / \*Ingesta de referencia de un adulto medio (8400kJ/ 2000kcal) / \*Dose de referência para um adulto médio (8400kJ/2000kcal) / (\*H ΠΠΑ ενός μέσου ενήλικα - مصرف مرجع برای بزرگسالان به طور متوسط (8400 کیلو ژول / 2000 کیلو کالری) / (ارشادات القيمة المرحبة للشخص البالغ (8400 کیلو جوم / 2000 کیلو کالوری) / (8400کیلو کالری / 2000کیلو کالری))

\*Reference intake of an average adult (8400kJ/ 2000kcal) / \*Apport de Référence pour un adulte-type (8400kJ/ 2000kcal) / \*Referentie Inname van een gemiddelde volwassene (8400kJ/2000kcal) / \*Assunzioni di riferimento di un adulto medio (8400kJ/ 2000kcal) / \*Ingesta de referencia de un adulto medio (8400kJ/ 2000kcal) / \*Dose de referência para um adulto médio (8400kJ/2000kcal) / \*مصرف مرجع برای بزرگسالان به طور متوسط (8400 کیلو ژول/ 2000 کیلو کالری) / \*Η ΠΠΑ ενός μέσου ενήλικα (\*Intake value for an average adult) (8400 kJ/ 2000 kcal) / \*الدالة (8400 كيلوجا / 2000 كيلو كالوري) / \*إشارات القيمة لمجموعة الأشخاص

# WHAT WOULD BE THE BEST TOOL?

Yet, would this be practical?

- **Twenty six** letters and half a dozen additional signs are sufficient to write the entirety of the english language
- **Tens of thousands** of characters are necessary to write the entirety of the chinese languages

# WHAT WOULD BE THE BEST TOOL?

- Studies in China have shown that functional literacy in written Chinese requires a knowledge of between **three and four thousand (3,000-4,000)** characters.
- In Japan, about **2,200** characters are taught through secondary school; hundreds more are in everyday use.
- Teaching of Chinese characters in South Korea starts in the 7<sup>th</sup> grade and continues until the 12<sup>th</sup> grade; a total of **1,800** characters are taught.



# WHAT WOULD BE THE BEST TOOL?

- However, learning **3,000** characters to communicate with speakers of **any of today's 7,000+ languages** would require **far less time** than **learning ALL those foreign languages**
- Obviously, there could be a number of obstacles, like sentence structure, but the basic rules – like **word order** – would be easy to learn while learning the characters
- Misunderstandings would still be possible, but likely much less than when someone has to write in a language he/she hardly knows; and, if necessary, simple algorithms could solve such comprehension problems (i would recommend reading my own paper on the "**disambiguation of the French language**").
- And we can be reassured by the fact we have a precedent: **communication by writing** (筆談 / **bǐtán**) – whereby 4 different families of languages – Austroasiatic, Sino-Tibetan, Japonic, and Koreanic – were able to communicate effectively using **Chinese characters**



# WHAT WOULD BE THE BEST TOOL?

- JUST LIKE **LOGOGRAMS REPLACE** THE **LANGUAGE-DEPENDENT GRAPHEMES**

- cincuenta y dos / zwei und fünfzig / cinquante-deux /

fifty two [**spoken**] =

**52** [written]

- querer / lieben / aimer / love [**spoken**] =



- cuatro / vier / quatre / four [**spoken**] =

**4** [written]

- sonreír / lächeln / sourire / smile [**spoken**] =



# WHAT WOULD BE THE BEST TOOL?

- **CHINESE CHARACTERS** WOULD **REPLACE** THE **LANGUAGE-DEPENDENT GRAPHEMES**

- isla / Insel / île / island [**spoken**] = *shima/dao* 岛 [written]
- ir / gehen / aller / go [**spoken**] = 去 [written]
- montaña / Berg / montagne / mountain [**spoken**] = 山 [written]
- mar / Meer / mer / sea [**spoken**] = 海 [written]
- comida / Mahlzeit / repas / meal [**spoken**] = 饭 [written]
- río / Fluß / rivière / river [**spoken**] = 河 [written]
- aldea / Dorf / village / village [**spoken**] = 村 [written]
- comer / essen / manger / eat [**spoken**] = 吃 [written]
- gracias / danke schön / merci / thank you [**spoken**] = 谢谢 [written]

# HOW WOULD THIS GUARANTEE THE SURVIVAL OF “MINOR” LANGUAGES?

- Speakers of “minor” languages would be **able to use their own language** when communicating with speakers of a **dominant** language (administration, officials **also using Chinese characters**) and would be on **equal linguistic footing with them**
- Speakers of “minor” languages would **no longer** feel the practical need to urge their children to learn the **dominant** language **and abandon their own language** (they would use their language in **each and every situation of daily life** and be able to **pass it on** to the next generation)

# HOW WOULD THIS GUARANTEE THE SURVIVAL OF “MINOR” LANGUAGES?

- Using the **words of their own language**, speakers of “minor” languages could **enrich their language** by adopting flowery expressions of other languages – **and vice-versa** – thus **pumping new life into their language**
- Meaning to say “*immediately*”, a French speaker might write 田上 (**on the field** / sur le champ), while a Chinese speaker would write 马上 (**on the horse**).
- Or like 小心 (little heart / attention!)
- Or like 加油

# The Oxford English Dictionary adds 'add oil' in its latest update

WATSUP OCTOBER 20, 2018



In Chinglish, it is common to say 'add oil' to encourage people in competition or before an examination.  
Photo: iStock

HONG KONG CHINESE // OPINION

## What's next after 'add oil' gets in the Oxford dictionary?

Some more Chinglish words commonly used in Hong Kong may also be included in Oxford dictionary

加油

## 'Add oil' entry in Oxford English Dictionary is just latest Cantonese phrase to hit mainstream

Ernest Kao  
South China Morning Post 17 October 2018

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Jiayou! Phrase 'add oil!' added to Oxford English Dictionary



# HOW WOULD THIS GUARANTEE THE SURVIVAL OF “MINOR” LANGUAGES?

- Without resorting to **today's gibberish**, speakers of **any language** would be able to **communicate with the entire world** – especially on **social media** – without any distinction of language (unlike today), thus making our world truly global
- Speakers of “minor” languages would have **access to the internet** in a language they understand, and could also **contribute to the net in their language**; in addition, the contents in languages other than English **would be accessible to all**
- It would be easy to **develop an application** where you would simply **select the language** in which the sentence you just typed, recorded or received would be **read**. Your **own language – minor or major** – would be an **open gate to all other languages and cultures on this planet**

HOW WOULD THIS GUARANTEE THE  
SURVIVAL OF “MINOR” LANGUAGES?

... AND ~~STOP~~ USING  
IT

... AND **CONTINUE**  
USING IT!

# THE PROOF OF THE PUDDING IS IN THE EATING!

- Now let's fast forward to 2050:
- by now, we all know/use – **reading and writing** – Chinese characters
- Even a **moribund Celtic** language - like Breton - can be used to **communicate directly** with people of **all languages**

- Trugarez。
- **谢谢**
- deomp
- **我们去**
- da zebriñ
- **吃**
- hor
- **我们的**
- pred
- **饭**
- kalon digor!
- **好胃口!**
- **谢谢。我们去吃我们的饭。好胃口!**

- Trugarez. Deomp da zebriñ hor pred. Kalon digor!




谢谢。我们去吃我们的饭。好胃口! (谢谢。我们去吃饭。好胃口!)

- You will all understand without a (Google) magic wand. Nothing else necessary



- And your own direct understanding of the NOW UNIVERSAL CHARACTERS will be better than Google's translation below!
- Thank you. Let's go eat our meal. Good appetite!
- Danke. Lass uns essen gehen. Guten Appetit!
- Merci. Allons manger notre repas. Bon appétit!
- Gracias. Vamos a comer nuestra comida. ¡Buen apetito!
- Благодарю вас. Пойдем, съешьте нашу еду. Хороший аппетит!



If you talk to a man in a  
**language he understands**, that  
goes to his **head**. If you talk to  
him in **his language**, that goes  
to his **heart** .

***Nelson Mandela***

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谢谢



Yading,  
China,  
+/-  
5,500m  
elev.

[www. supralingua.com](http://www.supralingua.com)