# I Make Languages (and you can too)

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### There's a paper, too!

Read it, it's good.

http://conlang.org/26c3.pdf

CC by-nc-sa (slides too)
Do cool stuff for free;
credit & tell me.

### The plan

```
Overview (~10 min)

What?

Why?

Interactive demo! (~30 min)

Conlanging by (crowd) committee :-)

Q & A (~10 min)
```

Workshop (room B04) right after this

### Conlang = Constructed Language

A language

For human use (... or maybe aliens)

Made intentionally

### Artlang = Artistic language

Aesthetics first

Naturalistic (usually)

Part of a fictional culture (often)

... or a whole language family

Never really "finished"

### Guess the language!

Just shout the answer

Ready?

### Artlang: Quenya

A star shines upon the hour of our meeting.

"Elvish" in Tolkien's Lord of the Rings

One of them. Also: Sindarin, Telerin, Doriathrin...

Books written for the language, not vice versa

Stereotypically pretty

soft, liquid, long sounds

Inspiration for *lots* of artlangers

### Auxlang = Auxiliary Language

#### **Neutral**

Easy to learn

"Simple"

Creole-ish

#### Proselytized

~Finalized first

Point is to speak, not create

Highlander syndrome

### Auxlang: Esperanto

La abeloj havas felon, sed ili ne taŭgas por karesi.

Bees have fur, but they're no good for petting.

100k~2M speakers

~1k native speakers!

Very Eurocentric :(

### Engelang = Engineered language

also: philosophical language, logical language

Systemically radical

Overt design goals

top-down design

Rare

Each one different

### Engelang: Lojban

#### cmalu je melbi ke nixli ckule

a pretty little girls' school

Super complex grammar

but ultra precise!

can be precisely vague too: e.g. "co'e" means "foo"

Computer-parsable

da'i ganai do crebi'o la lojban gi le se cusku be do cu mulno pavysmu je logji

> .i .ie ku'i cusku fi le prenu klesi poi certu la lojban

Learn Lojban! Tomorrow 18:30-20:00 @ B04

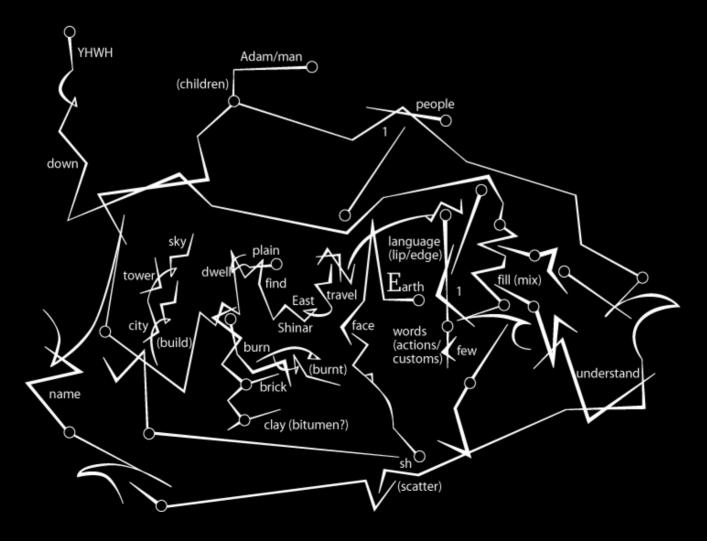
### Me: Gripping language

2-person only
touch-based
ask me later for a demo
undetectable
metaconversational

http://000024.org/conlang/gripping.html

### Me: Non-linear writing systems

e.g. Schuyler Duveen's Ouwi (.org):



#### How do I start?

#### Scope

names? phrases? full language?

#### Genre

art, aux, enge, etc

#### Aesthetic / Goals

phonaesthetics, conculture, priorities, spec, etc

#### Defining feature(s)

insert cool hook here?

optional - most artlangs don't really have one

### Fiat lingua!

We're going to make a (tiny) language together.

I ask questions, you shout answers.

Ready?

#### Genre / Aesthetic / Goals

A priori naturalistic artlang for humans.

#### What's our æsthetic?

- a) pretty
- b) harsh
- c) weird

Any twists / other ideas to add?

### Step 1: Phonlogy

What sounds?

[phonetic] inventory

### Step 1: Phonology

#### What goes in a syllable?

phonotactics

a) CVN

Toki Pona: mi lon pimeja. waso ike li tawa sike lon lawa mi. pipi jaki li moku lili e noka mi. mi wile e pini.

b) CCVC

English\*: Stan had a sly tree with a thwarted dream.

<sup>\*</sup> Extremely simplified. Is really C<sup>3</sup>VC<sup>5</sup> e.g. "strengths".

### Step 1: Phonology

#### What "sounds the same"?

```
/phonemic/ inventory
```

English: p/ = [p] or  $[p^h]$ 

sound change rules

English aspiration: [phit] vs [spit]

### Step 2: Orthography

#### How do we write this down?

```
Map sounds to written symbols, ish
```

... or maybe sound + meaning, à la Chinese

most are irregular (google "ghoti")

writing changes slower than speech

Make a font? (bonus points!)

Go browse http://omniglot.com

For now: Romanization.

#### How do pieces form words?

Isolating: just simple words

Toki Pona: o weka e nimi namako

Synthetic: put a bunch of stuff together

German: Rindfleischetikettierungsüberwachungs-

aufgabenübertragungsgesetz

#### Synthetic

Agglutinating: pieces are distinct

we broke, I broke, I break, we break

Turkish: kırdık, kırdım , kırıyorum, kırıyoruz

Fusional: pieces multitask

Spanish: rompimos, rompí, rompo, rompemos

#### Other

Templating: apply regex

Arabic: kitābun "book", maktabun "library", katabtu "they wrote (pl. fem.)"

#### a) Isolating

Chinese: 我汉语说的太不好

Wǒ hàn yǔ shuō de tài bù hǎo.

#### b) Agglutinative

Japanese: 私たち食べたくなかった。

### Step 4: Make some words!

### Step 5: Syntax

Where do words go in a sentence?

**Basic Word Order:** 

- a) SOV Japanese: 男は犬を見た
- b) SVO English: The man looked at the dog.
- c) VSO Hawaiian: Ua nana ke kane i ka 'īlio.

### Step 6: Finish that sentence!

### Step 7...N,000,000: Revise

#### Languages change over time

proto-Foolang? hillbilly Foolang?

You think of cool new tweaks

The old stuff is now "ungrammatical"

#### You've got gaps

How *do* you handle subordinate locative clauses in middle voice anyway?

#### Use & Publish

#### Write some stories in it

Traditional: The Babel Text (Genesis 11:1-9)

Now the whole world had one language and a common speech...

Artsy: North Wind and the Sun, other poems

Hardcore: Make your own

#### **Document** it online

#### Do a Conlang Relay

like "Telephone" / "Chinese Whispers"

... but translating to a new language at each step

#### Resources

CONLANG mailing list @ Brown

Zompist Bulletin Board (ZBB)

**Omniglot** 

Sarah Higley – Hildegard of Bingen's Unknown Language

Thomas Payne – *Describing Morphosyntax* 

Arika Okrent – In the Land of Invented Languages

More in the paper!

http://conlang.org/26c3.pdf

#### Want more?

# conlang.org

podcast.conlang.org (subscribe!)

conference.conlang.org

library.conlang.org

### Shameless plugs

#### Need a conlang made?

e.g. for a game, novel, film, TV, etc

http://conlang.org/jobs/hire\_us.php

#### Join the Language Creation Society!

nonprofit, conferences, podcast, etc

http://conlang.org/members.php

Also, we could really use audio/video editors:

http://conlang.org/jobs

#### I do other stuff too

A03, 12/30 16h-18h: Meditation for hackers

Talk to me about:

cognitive neuroscience, empathy

P2P botnets, thin steganographic crypto filesystems

social apps & games for smart people

email me for beta access (deploying in a couple months)

Ruby/Rails development

sign language music

etc.

Me: http://saizai.com ccc@saizai.com

#### <3 feedback

## http://bit.ly/conlang\_talk

lcs@conlang.org
DECT 4724 (4-SAI)
AIM, IRC, LJ, Skype etc: saizai

Workshop: B04, after this

The end!

#### OK, so I lied.

The following slides are from previous iterations of this talk. I left 'em in just in case I might want to use them later. You might find them interesting.

### Artlang: Klingon



Give me your opinion!

Marc Okrand for Star Trek

Definitely not pretty

Naturalistic... ish

all its features happen, just rarely

Klingon Language Institute has an annual exam

### Artlang: Teonaht

Niffodyr tweluanrem letteuim an.

The gods have retractable claws.

Sally Caves, aka Prof. Sarah Higley

Spoken by flying cat-people (feleonim)

Idiosyncratic spelling (e.g. ht =  $[\theta]$ )

also a custom orthography, but it's not fontified :(

### Auxlang: Neo Patwa

Do-pela din-tinta na cidya, ta makan pwason.

Two blue birds ate fish.

Jens Wilkinson

More international vocabulary

↑ = Tok Pisin, Hindi, Spanish, Japanese & Mandarin

Fairly new; few speakers

in very high competition w/ other new auxlangs

### Engelang: Iţkuîl



On the contrary, I think it may turn out that this rugged mountain range trails off at some point.

John Quijada (v2: Ilaksh)

Maximum information density

**Precise** 

Expresses unusual details

e.g. whole system for 3d pointer words

#### Philosophical lang: Toki Pona

o weka e nimi namako

Omit needless words.

Sonja Elen Kisa

Minimalist – ~123 words total

Dada-Zen philosophy

"friend" = jan pona (person good); "bad friend" = ?

Like Newspeak, but happy

#### Partially con-

```
Korean writing (Hangul)
  created & instituted by king overnight
Modern Hebrew
  was dead for centuries, then back-derived
Signed Exact English (SEE)
  combination of English grammar & ASL vocab
French?
  regulated by l'Académie française (... or they try)
etc
```

### A posteriori conlang

#### Derived from existing language(s)

alt-historic

"What if Japan invaded Scotland?"

accessibility

"My audience already knows romance languages..."

laziness

"Why bother making a new grammar?"

### A priori conlang

```
Made up from scratch
```

```
philosophical / logical

"Etymology = ontology"

personal aesthetic

"Qapla' sounds cool"

do something new*

"No verbs!"
```

\* a natlang's already done it, except worse (ANADEW)