# qUALMS Speed Conlanging Instructions and Examples

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# Introduction

A conlang, or constructed language, is a consciously created (human) language. Conlanging refers to the process of creating such a language, usually for entertainment. This is normally an open-ended endeavor, as it takes a very long time to work out a relatively complete language, so we've created a system to help would-be conlangers create a small-ish language in a single sitting.

These materials were designed to be used as a group activity for a 90 minute club meeting. Feel free to adapt them for other uses.

## Credits

This document and the accompanying worksheet were compiled by Kenneth Hanson. Thanks to Elliot Selkirk and Eric Villanueva for help with creating the worksheet and example sentences, and also for help with testing the materials.

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### 1. Overview

This document consists of three main sections:

- 1. General instructions
- 2. Notes and suggestions for each component of the language you will create
- 3. A list of sentences to translate into your language, for concrete examples of the vocabulary, morphology and syntax that you will need to create
- 4. A list of morphosyntactic properties with definitions and examples, for reference

The separate Language Specification Worksheet will help you organize the grammar and lexicon for your language. The Language Specification Worksheet contains five sections:

- 1. Phonetics
- 2. Phonology
- 3. Morphosyntactic Properties
- 4. Morphology and Lexicon
- 5. Syntax

This worksheet is designed to make the conlanging process as straightforward as possible. When there are a relative concrete set of choices for features, such as headedness and case systems, they are listed explicitly for you to chose from. Elsewhere, the language is broken down into its basic conceptual components for you to fill in.

This document, the Language Specification Worksheet, and links to other resources mentioned below are available online at <a href="https://www.msu.edu/~hanson54/conlanging/">https://www.msu.edu/~hanson54/conlanging/</a>>.

These materials assume that you know at least some linguistics (equivalent to an introductory course), but not that you know the details of current linguistic theories. By following this system, you'll end up with a largely descriptive grammar of your new language.

For the sake of simplicity, neither this document nor the Language Specification Worksheet deals explicitly with semantics, pragmatics, or sociolinguistic phenomena, but feel free to consider these and other language properties as well. Additionally, there is no section for orthography -- for the purposes of this activity, you should use your phonetics and phonology as the basis for a phonetic or phonemic alphabet.

# 2. Instructions

If you are doing something other than a 90-minute multi-group workshop, you may choose to modify these instructions.

- 1. Form groups of 3-4 people, including members that have taken phonetics and phonology, morphology, and syntax if possible. We'll help you identify potential group members.
- 2. Start by briefly reviewing the notes, suggestions, and examples in this document. You can then return to these reference sections as needed while you are choosing features for your language.
- 3. You can complete the sections of the Language Specification Worksheet in any order, but you will want to at least partially complete each section in the given order before going back to finalize each section. The reason for this is that it will be very hard to create your lexicon and affixes before deciding on at least some of your phonetics, phonology, and morphological properties.
- 4. To make sure you are able to finish your language in a timely manner, avoid trying to create excessively complex paradigms. Instead, start with something simple, and focus on creating the grammar you need to translate most of the example sentences into your language.
  - a. For example, you may want to keep the amount of agreement and irregularity in your language to a minimum. Along the same lines, don't try to reproduce all of the intricacies of the English tense/aspect/mood system.
  - b. You can always revise and expand your grammar later if you choose.
- 5. That being said, do make use of features and contrasts that don't exist in English; otherwise you'll just end up with a language that is essentially a simplified English grammar plus some made up words.
  - a. In order to ensure that we get a good variety of languages, you will be assigned several "exotic" features that your language must use. For the remaining components, you get to choose freely.
- 6. As you build your language, make a short list of example sentences with glosses (and optionally trees) to demonstrate your language.
- 7. Near the end of the activity, we will ask each group to present their language, highlighting some of the features you chose and your example sentences.
- 8. We'll be wandering around to help groups with any questions or problems. If there is anything you don't understand on the handouts, don't hesitate to ask!

# 3. Notes and Suggestions

Notes below are organized according to the sections of the Language Specification Worksheet.

#### 3.1 General

See the Language Construction Kit (http://www.zompist.com/kit.html) for a detailed overview of all aspects of creating a language. This site is written for non-linguists, so it should be very easy to follow for people with a linguistics background.

#### 3.2 Phonetics

In this section you will define the consonants, vowels, and other aspects of pronunciation for your language. This is where you get to decide how your language sounds -- make it as beautiful or disgusting as you like.

Put consonants that vary only according to voicing, aspiration, etc. in the same cell on the worksheet. Likewise, put vowels with that differ only in rounding or tenseness in the same cell.

See the IPA chart (link on website) for standard phonetic symbols and diacritics.

#### **Suggestions**

- Think about how many consonants and vowels you are going to use. The fewer segments you have, the longer your words will need to be.
- Do use sounds and contrasts that don't exist in English.
- Don't use sounds that are excessively hard for English speakers to produce, or contrasts that are impossible for English speakers to perceive.

# 3.3 Phonology

In this section you will describe the sound patterns of your language, including syllable structure, prosody, and rules defining allophones in different environments.

Basic syllable structure consists of an onset (zero or more consonants), nucleus (vowel, diphthong, trithong, or syllabic consonant), and coda (zero or more consonants). When there is more than one C position, each one usually allows a different set of consonants. For example, the second consonant in the onset may be restricted to glides like [i,w].

See the Phonological Processes handout (link on website) for examples of common phonological processes and simple formal notation.

#### **Suggestions**

- Think about how complex your syllable structure is going to be. The simpler the syllable structure, the longer your words will need to be.
- Consider making a simple tone system, with just high and low tones.
- Consider making your language syllable- or mora-timed, rather than stress-timed as in English.
- Prosody is less critical for this activity, but consider choosing simple rules like "lexical words have stress on the first/last/penultimate syllable".

### 3.4 Morphosyntactic Properties

In this section you will define the basic properties of your language's morphology and syntax. The details will be left to the following sections. See the Morphosyntactic Properties Reference below for more examples and definitions.

#### **Notes on Categories**

- Determiners (D) are a generalized category that includes the "articles" (a, the) as well as demonstratives (this, that) and in modern theories, pronouns (which usually lack NP complements).
- Tense (T) sometimes appears as an overt node above verbs, such as "will" in English and -ru/-ta for nonpast/past in Japanese. In other languages, such as Romance Languages, verbs move to T position in tensed clauses.
- Number (Num) and Numeral are not the same category. Numerals (like "one") are words in English, while Number (singular/plural/otherwise) is an inflectional suffix.
- Complementizers (C) mark clauses boundaries. In English, embedded clauses are often marked with "that" (declarative) or "if" (interrogative), and auxiliary verbs move to C position in main clauses in questions.

- Auxiliary verbs (Aux) appear in addition to the main verb, marking features such as aspect (be V-ing and have V-en for progressive/perfect in English) and modifying the VP structure, as in passives (be V-en) in English.
  - Modal Auxiliaries (M) are a subcategory of Aux that mark grammatical mood. In English, M and T
    are usually considered to be the same category.
- Negation (Neg) usually shows up somewhere around V and T. In V-initial and V-final sentences, this will be near the edge of the clause.

#### **Suggestions**

- If you choose to use mixed headedness, do it like German and be consistent within a subsection of the grammar.
- Analytic, isolating, and agglutinative languages are much easier to create that moderately/highly fusional languages since you only need a small set of each type of inflectional morpheme.
- Tense/aspect/mood systems are often atrociously complicated, with a single word or morpheme
  representing some combination of all three in some but not all cases. Keep yours simple by completely
  separating tense, aspect, and mood. Make the lexical aspect of your verbs the same as their English
  equivalents.
- Consider using a mix of European-like and "exotic" features to make things interesting. If you know of other systems not provided explicitly on the worksheet, feel free to use those as well.

# 3.5 Morphology and Lexicon

In this section you will create your inflectional, inflections, and lexical morphemes and define the order or morphemes within a word. This section is rather simple once you've decided completed the previous two sections.

#### **Suggestions**

- Create your lexicon and morphology incrementally, starting with just the pieces you need to get a single
  real sentence and building from there, rather than creating a bunch of words for a couple categories and
  not being able to do anything with them.
- Try to make use of all the phonemes and allophones in your language and use a variety of word lengths. It's easy to get caught in trap of making all your words very similar.

# 3.6 Syntax

In this section your will define the basic word order and phrase structure of your language, as well as transformations that modify the default word order in various constructions. In this section especially, you can use purely descriptive rules to get the amount of grammatical complexity you need for this activity.

For word order, the most basic typological property to decide is the order of verbs, (agentive) subjects, and objects in a simple transitive clause. There are 6 logical possibilities, though some are much more common than others.

- SVO and SOV -- very common
- VSO -- sizable minority
- VOS, VSO, OVS -- rare (increasingly from left to right)

More broadly, you will also need to determine the position of auxiliary verbs with respect to the other clausal constituents (usually adjacent to V), and the relative ordering of nouns, adjectives, numerals, and determiners. For most other categories, you just need to decide the order between heads and their complements (objects) and adjuncts (modifiers).

Examples: P <> NP, C <> Clause, PP Modifier <> VP, Adv <> VP

In other cases, like adverbs, things can be messy, but there is usually a "default" order, that is less marked/ focused or at least more common. In some cases, such as subjects and question words/focus positions (all "specifiers" in syntactic theory), you may have constituents on both sides of the head.

#### **Suggestions**

- Don't worry about deriving your language's word order from basic principles -- just provide a descriptive grammar.
- If you are comfortable with syntax (whether simple phrase structure, X-bar, or Minimalist grammar), consider drawing trees for some of your example sentences.

# 4. Sentences to Translate

The following sentences provide concrete examples of vocabulary and morphosyntactic features to create in your language. It's not necessary to translate every sentence -- feel free to pick and choose or create your own examples.

Note that you may choose not to have your language mark some features found in English, such as definiteness, and you can also mark features that are not marked in English, such as animacy.

Subjects, Objects, Verbs, NP types, Case	
The rock fell.	intransitive, non-agentive, definite NP, inanimate
A rock fell.	indefinite NP
The man ran.	intransitive, agentive, animate
The cat ate the fish.	transitive
She ate it.	3P pronouns, masculine/neuter, nominative case
It ate her.	accusative case
I love you.	1P pronoun, 2P pronoun
There is a tree on the hill.	existential, locative PP
Copular Predicates, Negation, Demonstratives	
This flower is pretty.	adjectival predicate, demonstrative
This flower is not pretty	negation
That man is a king.	nominal predicate, role predicate
John is the king.	identification
More Objects	
John went to the store.	locative PP
John gave a cake to Mary.	direct object + prepositional object
John gave Mary a cake.	indirect object + direct object
Questions, Commands, Clausal Modifiers	
Mary ate the cake.	declarative sentence
Did Mary eat the cake?	yes/no question
Who ate the cake?	subject question
What did Mary eat?	object question
Bill hid the cake quickly.	manner adverb
Bill probably hid the cake	modal adverb
Bill hid the cake yesterday.	temporal noun
Bill hid the cake for Mary.	adjunct PP
When did Bill hide the cake?	adjunct question
Hide the cake!	command
Tense, Aspect, and Mood	
The monkeys dance under the moon each night.	present tense, habitual aspect

The monkeys are dancing.	progressive aspect
The monkeys have danced.	perfect aspect
The monkeys danced last night.	past tense
The monkeys will dance.	future tense
He can sing.	potential (ability)
I might sing.	potential (probability)
You may sing.	permission
You should sing.	suggestion
You must sing.	obligation/necessity
Noun Phrases	
I have a puppy.	singular, indefinite
I have two puppies.	numeral, plural
I have some puppies.	existential quantifier
I have all the puppies.	universal quantifier
I have no puppies.	negative determiner
Puppies are cute.	generic NP
I want a happy puppy.	adjectival modifier
I want a puppy with spots.	PP modifier
I want those two spotted puppies.	Demonstrative + Num + Adj
Embedded Clauses	
The king loves puppies.	simple sentence
The queen said [that the king loves puppies].	complement clause
We have a king [who loves puppies].	relative clause
The king loves puppies [because puppies are cute].	adjunct clause
The king seems [to love puppies].	raising infinitive
The king wants [to love puppies].	control infinitive
The king wants [us to love puppies].	ECM infinitive
Derived Verbal Constructions	
We love puppies.	simple transitive
Puppies are loved (by all).	passive
The king forces us to love puppies.	causative
We are forced to love puppies (by the king).	passive-causative

# 5. Morphosyntactic Properties Reference

This section provides notes and examples for the features covered in the Morphosyntactic Properties section of the Language Specification Worksheet.

# 5.1 Typological Properties

- Headedness -- the relative ordering between heads of words/phrases and their complements (objects)
  and adjuncts (modifiers). Does the first or last word in a phrase determine its category? Does the first or
  last morpheme in a word determine its category?
  - o English has head-final words, and primarily head-initial phrases.
  - o German clauses are primarily head-final, while noun phrases are head-initial.
  - o Japanese is almost perfectly head-final.

- Word order freedom
  - English has "strict" word order -- deviations from the norm can only occur according to syntactic rules
    - In questions, the subject and first verb/auxiliary are inverted
    - The object can be moved to the front of the sentence using topicalization, clefting, etc.
  - German and Japanese exhibit scrambling -- clausal objects and adjuncts can appear in almost any order, but cannot be completely separated from their associated verb, and different orders have different pragmatic nuances.
  - Languages such as Latin supposedly have "free" word order in that adjectives can be separated from their nouns, etc., but even these languages have restrictions.
  - Languages with scrambling or free word order tend to have extensive case marking, showing which words are related syntactically.

#### Morphology type

- These terms are used to draw broad generalizations about a languages word structure. Note that the term "word" is ill-defined, but roughly equates to a unit that can be uttered in isolation in normal speech.
- Affix attachment
  - Prefixes attach to the front of a (partial) word
  - Suffixes attach to the end of a (partial) word
  - **Template morphology** takes a template of consonants and inserts some combination of vowels in the gaps (or the reverse)
  - Some languages have no prefixes, but some languages have primarily prefixes or a mix of both prefixes and suffixes.
- Morphemes per word (usually with respect to inflectional morphemes)
  - Chinese is analytic -- one morpheme per word, except perhaps in the case of compounds
  - English is **isolating** -- words have no more than one inflectional suffix
  - Most African languages are synthetic -- affixes on verbs mark features like tense and argument structure, and agreement for person and number with subjects and objects
  - The Inuit languages are **polysynthetic** -- entire sentences in English can be a single word in these languages
- Morpheme Fusion
  - Some languages allow a single (unbreakable) morpheme to encode some combination of features, such as person and number agreement on verbs in Romance languages -- this is called **fusion**.
  - Other languages don't allow fusion. When such languages are synthetic, they are usually called agglutinative languages (e.g. Japanese).
  - Note that contraction is not the same thing as fusion -- contractions in the current grammar of a language usually show a clear boundary between the constituent morphemes.
- Agreement is the (often redundant) marking of features of one word on another word that it is associated
  with
  - In most Indo-European languages, tensed verbs agree with their subjects in person and number.
  - In languages with extensive case marking, adjectives and determiners often agree with the case of their associated nouns.

# **5.2 Basic Morphosyntactic Features**

- **Tense** relates the time of the event or state denoted by a verb with the utterance time.
  - Tense often appears as a verbal affix, but can also be marked using independent words, such as auxiliary verbs.

- The basic tenses are present, past, and future, though in many languages some of these are combined or further subdivided.
- Many languages also have infinitive verbs, which are usually found in embedded clauses and inherit the tense of the clause they are embedded in.
- Some languages do not grammaticalize tense, marking it with adverbs or other words when it is marked explicitly.
- Common tense systems:
  - Past-Nonpast -- present and future are not distinguished
  - Realis-Irrealis -- past and present (realis) are distinguished from future/hypothetical (irrealis)
- Aspect denotes the internal time structure of an event or state -- ongoing or complete, one time or recurring, etc.
  - Aspect can be marked by auxiliary verbs or affixes.
  - o Different tenses and verb classes can have different default aspects
    - In English, present tense event verbs are habitual by default
  - Commonly marked aspects:
    - Progressive -- event is ongoing
    - Perfect -- event is complete
    - Habitual -- event is recurring
  - Verbs and verb phrases also have inherent aspectual properties (such as whether or or not they
    have endpoints) called lexical aspect, which is combined with grammatical aspect to create the
    final meaning
- Mood (or modality) expresses belief, attitude, and obligation with respect to events and states.
  - Mood can be marked using main verbs (with an embedded complement clause), auxiliary verbs, verbal affixes, or complementizers/clausal particles.
  - Commonly marked moods:
    - Indicative (factual statement) / interrogative (question)
    - Conditional, hypothetical, counterfactural (all complementizer "if" in English)
    - Potential (ability or probability) [auxiliaries or verbs in English]
    - Necessity, obligation, permission, suggestion, desire [auxiliaries or verbs in English]
- Case marks the grammatical function of a noun phrase, and may appear on nouns, determiners, nominal modifiers, or some combination of these, usually as an affix.
  - Case is typically divided into two categories:
    - Structural case, which is determined solely by syntactic position/function
    - Inherent case, which is marked on subjects and objects of particular verbs, according to the semantic role they receive
  - Languages with little or no case-marking typically use adpositions to mark the functions of objects and adjuncts that would be case-marked in other languages.
  - English has verb little case marking, and only uses it to distinguish pronouns in subject and nonsubject position.
  - In some languages, some positions will be case-less, or use a "default" case
  - Common case systems:
    - Nominative-accusative -- subjects get one case (nominative), objects another (accusative)
    - Ergative-absolutive -- subjects of transitive verbs get one case (ergative), subjects of intransitive verbs and objects get another (absolutive)
    - Tripartite -- subjects of transitive verbs, subjects of intransitive verbs, and objects each get a unique case
    - In each of the above, other syntactic positions may be handled in various ways
- Number marks the size of a group of entities denoted by a noun

- Example numbers: singular (exactly one), dual (exactly two), plural (more than one or number neutral)
- Example systems:
  - Singular-Plural -- singular is exactly one, plural is more than one or neutral (Do you have any pets? Yes, {one dog | two cats})
  - Singular-Dual-Plural -- exactly one and exactly two are distinguished
  - Not grammaticalized (as in Korean) -- nouns are number neutral by default, with optional singular/plural markers
- **Noun Classes** subdivide the noun lexicon into groups with different (often arbitrary and meaningless) morphology
  - Common variations:
    - Indo-European languages often mark nouns with gender -- masculine, feminine, or neuter
      - Some languages, like English, do this only for pronouns
    - African languages often have a number of **noun classes**, which may or may not include the equivalents of masculine, feminine, and neuter gender
    - East Asian languages often attach **classifiers** to nouns when they are treated as countable (or otherwise)
  - Individual noun classes or classifiers may or may not have anything in common semantically.
     When they do, they may show patterns such as:
    - animate/inanimate/human/animals and animal products/manmade
    - round/square/flat/oblong shape