RELISH (Rendering Endangered Languages Lexicons Interoperable through Standards Harmonization)

Justin Petro

The LINGUIST List

Overview

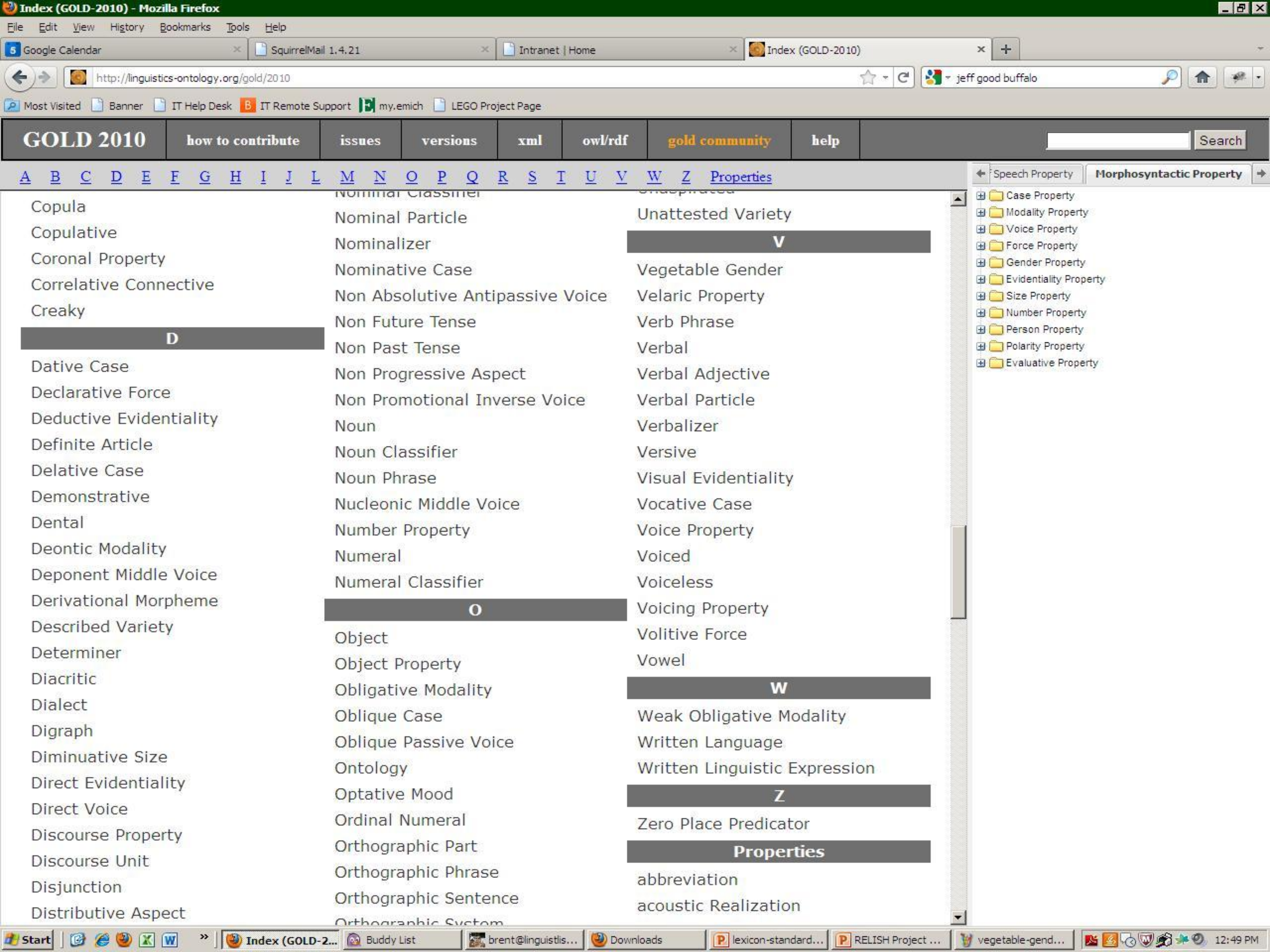
- Differences in Digital Standards for Lexicon Creation
  - U.S. (LEGO Project)
    - GOLD
    - LIFT/LEGO
  - Europe (LEXUS)
    - ISOcat
    - LMF
- Scope and Goals of RELISH Project
  - How RELISH harmonizes these standards
  - Rendering six lexicons into RELISH format (as proof of concept)
  - Ultimate goal of the project

Part 1: Diverging Standards

GOLD, ISOcat, LIFT, LMF

Introduction to GOLD

- General Ontology for Linguistic Description
- Formalized account of generally agreed upon linguistic concepts – “codifies general knowledge of the field”
- As an ontology, it allows complex relationships among concepts, although the only relationship currently instantiated is the hierarchical one of parent-child
- Can be used to promote interoperability and searching amongst disparate data sets (as seen in LEGO presentation)
- GOLD Website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A B C D E F G H I J L M N O P Q R S T U V W Z Properties
Speech Property
Morphosyntactic Property

Copula
Copulative
Coronal Property
Correlative Connective
Creaky

D

Dative Case
Declarative Force
Deductive Evidentiality
Definite Article
Delative Case
Demonstrative
Dental
Deontic Modality
Deponent Middle Voice
Derivational Morpheme
Described Variety
Determiner
Diacritic
Dialect
Digraph
Diminuative Size
Direct Evidentiality
Direct Voice
Discourse Property
Discourse Unit
Disjunction
Distributive Aspect

Nominal Classifier
Nominal Particle
Nominalizer
Nominative Case
Non Absolutive Antipassive Voice
Non Future Tense
Non Past Tense
Non Progressive Aspect
Non Promotional Inverse Voice
Noun
Noun Classifier
Noun Phrase
Nucleonic Middle Voice
Number Property
Numeral
Numeral Classifier

O

Object
Object Property
Obligative Modality
Oblique Case
Oblique Passive Voice
Ontology
Optative Mood
Ordinal Numeral
Orthographic Part
Orthographic Phrase
Orthographic Sentence
Orthographic System

Unaspirated
Unattested Variety

V

Vegetable Gender
Velaric Property
Verb Phrase
Verbal
Verbal Adjective
Verbal Particle
Verbalizer
Versive
Visual Evidentiality
Vocative Case
Voice Property
Voiced
Voiceless
Voicing Property
Volitive Force
Vowel

W

Weak Obligative Modality
Written Language
Written Linguistic Expression

Z

Zero Place Predicator

Properties

abbreviation
acoustic Realization

- Case Property
- Modality Property
- Voice Property
- Force Property
- Gender Property
- Evidentiality Property
- Size Property
- Number Property
- Person Property
- Polarity Property
- Evaluative Property

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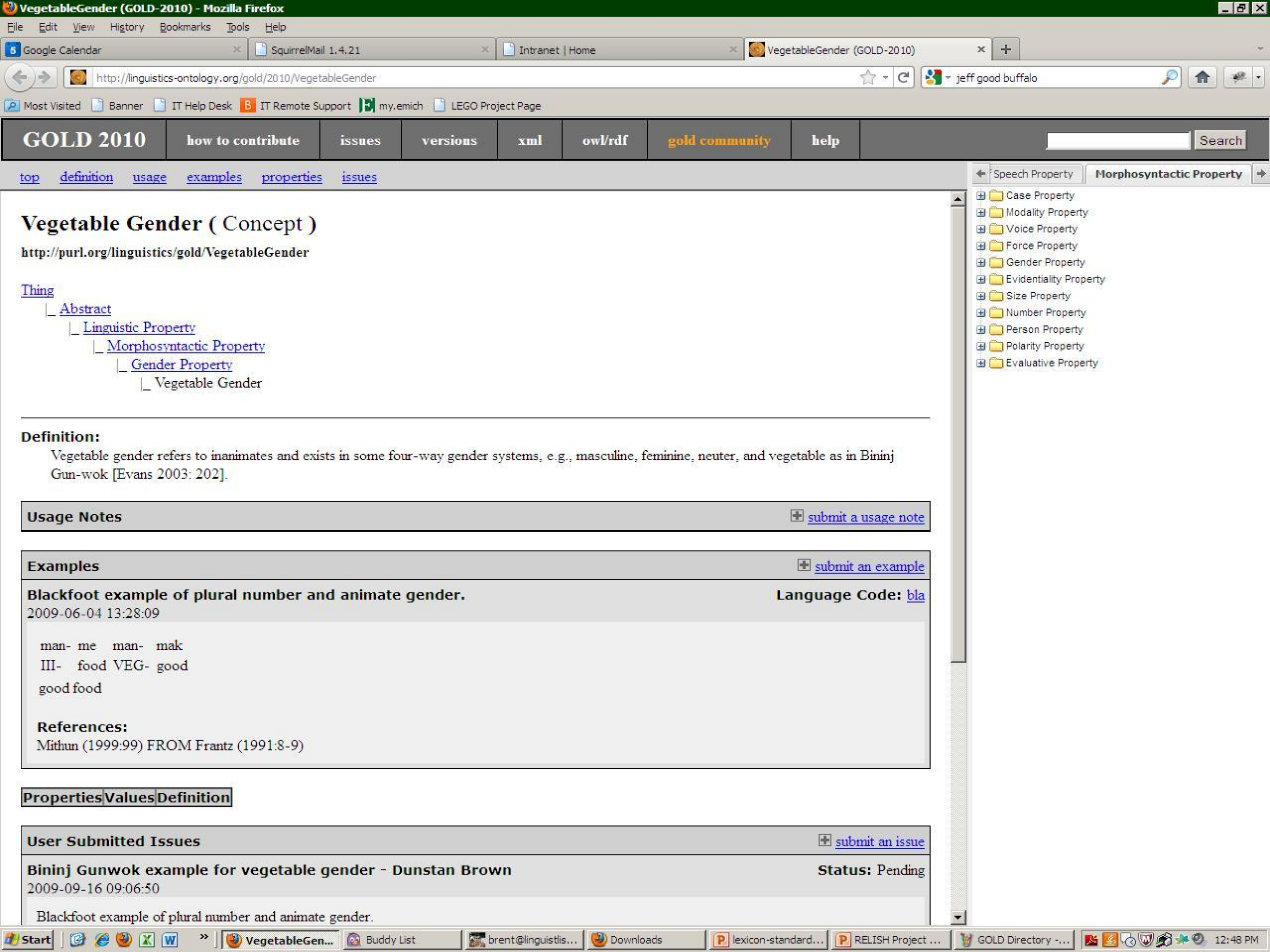
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Vegetable Gender (Concept)

http://purl.org/linguistics/gold/VegetableGender

Thing
- Abstract
  - Linguistic Property
    - Morphosyntactic Property
      - Gender Property
        - Vegetable Gender

Definition:

Vegetable gender refers to inanimates and exists in some four-way gender systems, e.g., masculine, feminine, neuter, and vegetable as in Bininj Gun-wok [Evans 2003: 202].

Usage Notes

submit a usage note

Examples

submit an example

Blackfoot example of plural number and animate gender. **Language Code:** bla

2009-06-04 13:28:09

man-	me	man-	mak
III-	food	VEG-	good

good food

References:

Mithun (1999:99) FROM Frantz (1991:8-9)

Properties	Values	Definition

User Submitted Issues

submit an issue

Bininj Gunwok example for vegetable gender - Dunstan Brown **Status:** Pending

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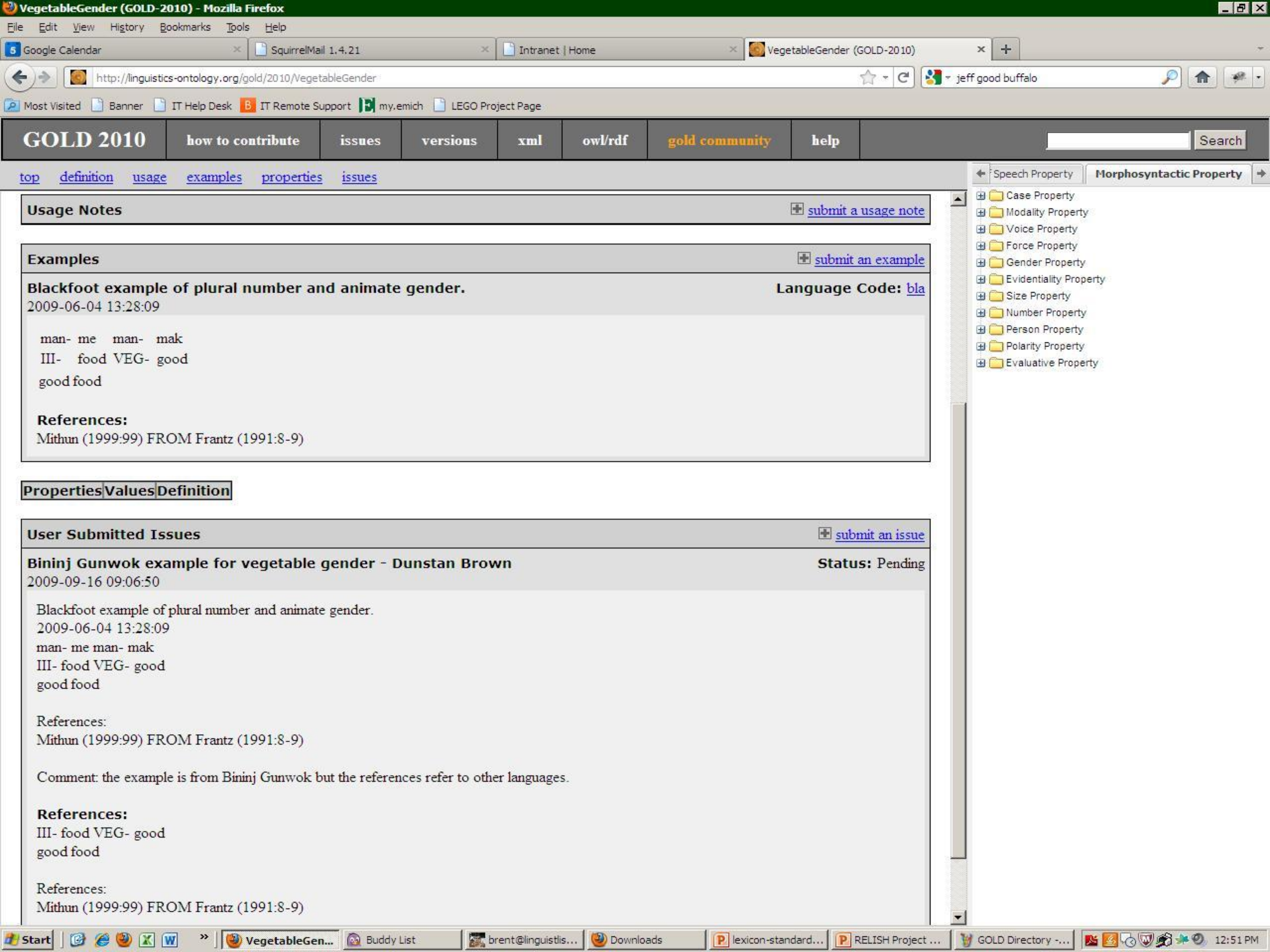
Blackfoot example of plural number and animate gender.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Usage Notes submit a usage note

Examples submit an example

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Properties Values Definition

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man- me man- mak
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References:
Mithun (1999:99) FROM Frantz (1991:8-9)

Comment: the example is from Bininj Gunwok but the references refer to other languages.

References:
III- food VEG- good
good food

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ISO Data Category Registry (ISOcat)

- Developed by Max Planck Institute for Psycholinguistics, (Nijmegen, The Netherlands.)
- Terminology Registry for Linguistic Concepts, currently without hierarchy (work is being done to change this)
- Maps divergent data to a common term set: Specific terms can be associated with data element names using a namespace reference and a datcat PID
- Used in LMF-compliant digital lexicons

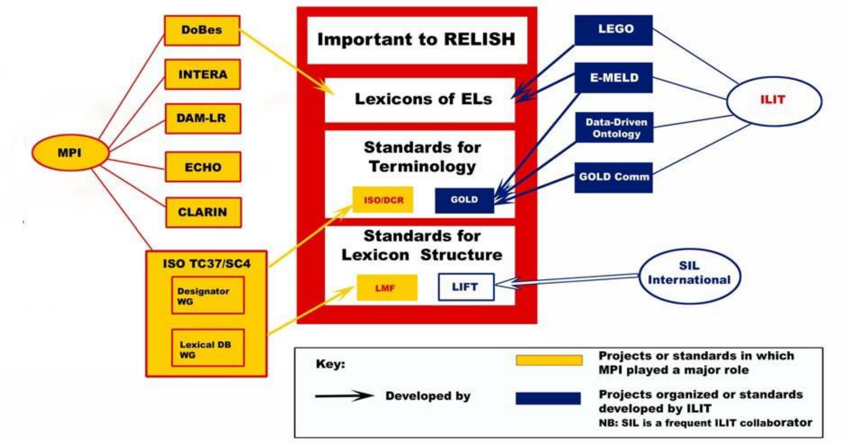
Digital Lexicon Standards

- LIFT (Lexicon Interchange FormaT)
  - Developed by SIL as a digital interchange format between lexicons created using different software tools
  - Schema restricted XML format
  - LL-LIFT: further restricted version of LIFT used by LEGO project
- LMF (Lexical Markup Framework)
  - ISO/24613:2008 standard for natural language processing (NLP) and machine-readable dictionary (MRD) lexicons.
  - Template for multilingual lexicon schemas
  - Used by LEXUS

Part 2: The RELISH Project

Its Scope and Ultimate Goals

Scope of RELISH Project: Integration of Digital Standards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CLARIN
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Designator WG
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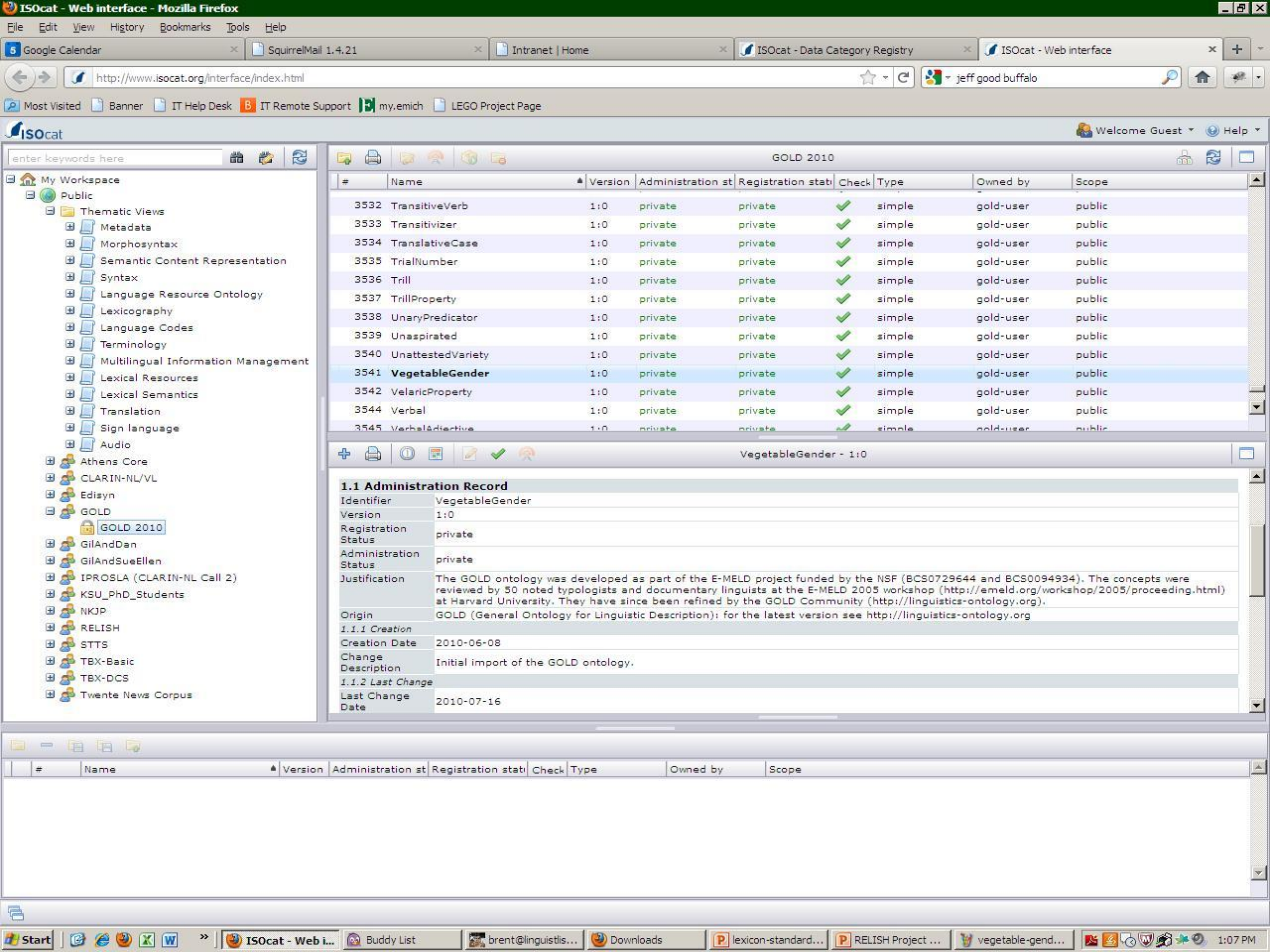
Important to RELISH
Lexicons of ELs
Standards for Terminology
ISO/DCR
GOLD
Standards for Lexicon Structure
LMF
LIFT
LEGO
E-MELD
Data-Driven Ontology
GOLD Comm
ILIT
SIL International
Key:
Developed by
Projects or standards in which MPI played a major role
Projects organized or standards developed by ILIT
NB: SIL is a frequent ILIT collaborator

- Integrate GOLD Concepts into ISOcat Registry
  - GOLD in ISOcat
- Create interchange format between lexicons output by LEXUS and those by LEGO
  - LMF serialization based on LIFT
  - LEGO and LEXUS will make RELISH output of lexicons available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Semantic Content Representation
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Lexicography
Language Codes
Terminology
Multilingual Information Management
Lexical Resources
Lexical Semantics
Translation
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3532	TransitiveVerb	1:0	private	private	✓	simple	gold-user	public
3533	Transitivizer	1:0	private	private	✓	simple	gold-user	public
3534	TranslativeCase	1:0	private	private	✓	simple	gold-user	public
3535	TrialNumber	1:0	private	private	✓	simple	gold-user	public
3536	Trill	1:0	private	private	✓	simple	gold-user	public
3537	TrillProperty	1:0	private	private	✓	simple	gold-user	public
3538	UnaryPredicator	1:0	private	private	✓	simple	gold-user	public
3539	Unaspirated	1:0	private	private	✓	simple	gold-user	public
3540	UnattestedVariety	1:0	private	private	✓	simple	gold-user	public
3541	**VegetableGender**	1:0	private	private	✓	simple	gold-user	public
3542	VelaricProperty	1:0	private	private	✓	simple	gold-user	public
3544	Verbal	1:0	private	private	✓	simple	gold-user	public
3545	VerbalAdjective	1:0	private	private	✓	simple	gold-user	public

1.1 Administration Record

Identifier	VegetableGender
Version	1:0
Registration Status	private
Administration Status	private
Justification	The GOLD ontology was developed as part of the E-MELD project funded by the NSF (BCS0729644 and BCS0094934). The concepts were reviewed by 50 noted typologists and documentary linguists at the E-MELD 2005 workshop (http://emeld.org/workshop/2005/proceeding.html) at Harvard University. They have since been refined by the GOLD Community (http://linguistics-ontology.org).
Origin	GOLD (General Ontology for Linguistic Description): for the latest version see http://linguistics-ontology.org
1.1.1 Creation	
Creation Date	2010-06-08
Change Description	Initial import of the GOLD ontology.
1.1.2 Last Change	
Last Change Date	2010-07-16

#	Name	Version	Administration st	Registration stat	Check	Type	Owned by	Scope

RELISH Project Goals

- Grant Project Goal: Harmonize Standards
- Proof of Concept for this goal: Take 6 Lexicons and convert them into RELISH format
  - From LEGO: Mocovi, Western Sisaala, and Fulfulde
  - From LEXUS: Udi, Wichita, and Tuva
  - Demonstrates utility of RELISH format
- Ultimate Goal of Project:
  - Provide widest accessibility to lexicons of endangered languages
  - Make lexical data interoperable for not only linguists, but historians, anthropologists, geneticists, and other scientists interested in language
  - Participate in the trend to encourage data interoperability and integrated cyber-infrastructure.