Engineering Language:

Electronic Literature, the "Value" of Words, and the Purposes of the First Year Writing Course in the United States

ELO Conference
August 15, 2018
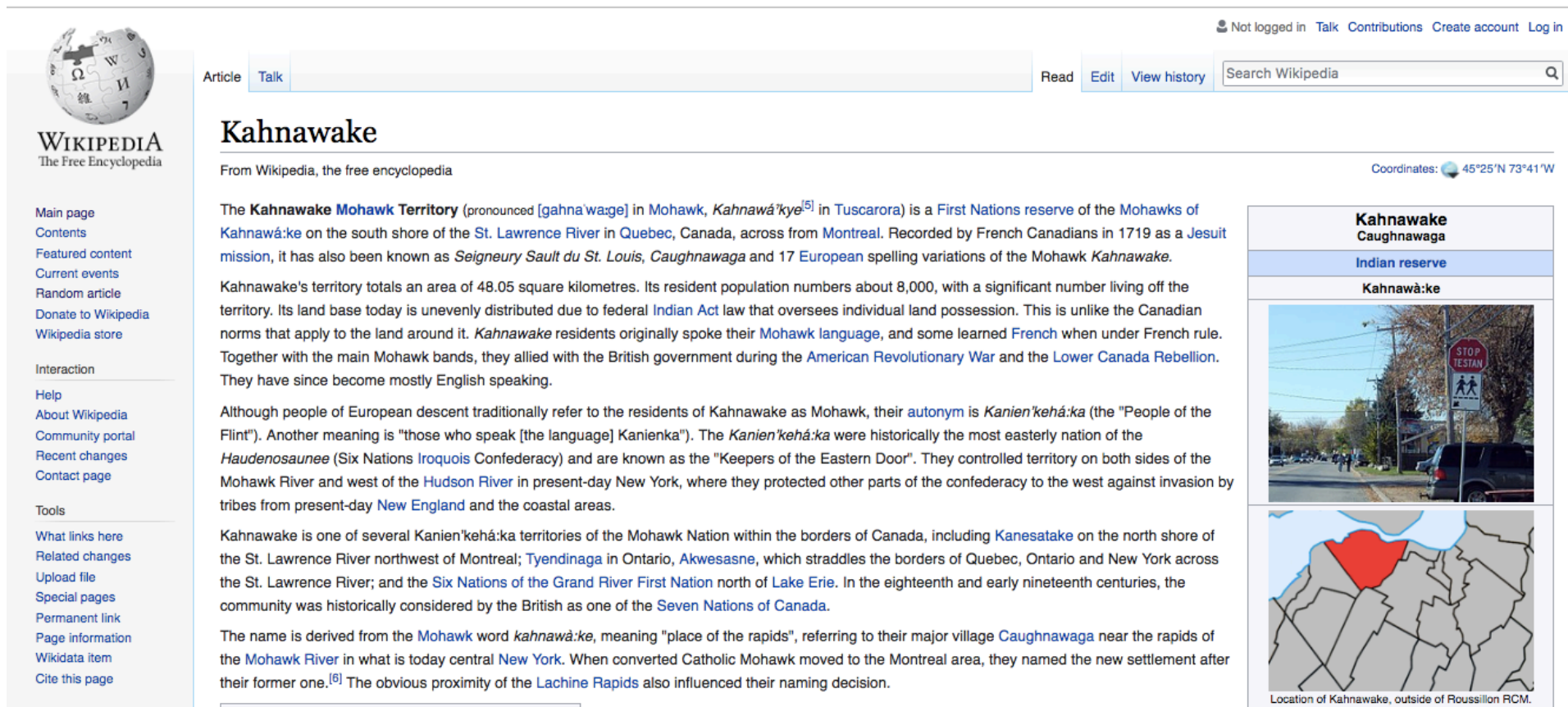
Johannah Rodgers, Ph.D.
Formerly: Associate Professor at The City University of New York;
Currently: Independent Scholar and Artist At Large

www.johannahrodgers.net
@what_is_writing

Having recently attended a conference at the Data and Society Institute in
NYC, I learned that in Native Studies, it is traditional to begin a talk by acknowledging
the occupied land upon which we meet. As a result, I will begin by

Naming Where We Are

Engineering Language: Electronic Literature, the "Value" of Words, and the Purposes of the First Year College Writing Course in the United States

Johannah Rodgers

Electronic Literature Organization Conference
University of Quebec at Montreal (UQAM)
August 15, 2018

Like most semi-sane U.S. citizens, I am, at the moment, in a very cranky and mostly despairing mood because of the current state of the political economy in the country where I was raised and where I, at least temporarily, still reside. As a result, what I'm going to talk about today will reflect this mood and my overall state of concern regarding how the U.S. got to where it is today, which I firmly believe has something to do with the state of public education practices and policies. That said, I will be "minding the gap," meaning when I refer to public higher ed writing instruction, I do so in a very specific national and regional context. For this presentation, I must ask that you, too, "mind the gap" with respect to economic inequities that are sometimes overlooked in conferences dedicated to technologies and literature and culture and the arts.

In this presentation, I have very little news to report, but I may have a somewhat unique perspective on the ways in which some of the many pieces of this larger puzzle related to the relationships amongst verbal language and technocultures fit together. Therefore, today, I am going to do what I do best: make a few jokes and make a few generalizations. One last caveat: I have been at various points in my life a fiction writer and I increasingly do not know whether everything I write should just be categorized as ~~fiction.~~ such   [Introduce DNA]

Having worked as a long-time college writing instructor and the founding director of a FYW program at the City University of New York, a position I recently left because I was unsuccessful in my attempts to negotiate for the full-funding of the program, I believe there are many reasons why we should care about and attend to the definitions and dynamics of verbal language. And, the work that I'm going to talk a bit about today, "At, Or To Take Regret," a very late contribution to Nick Montfort's Taroko Gorge Remix Project (2009), is a reflection and commentary on these, particularly in relation to the first year American college writing course. Like much of my recent work-- "Wealth Begins With Human Need," (a remediation of Chapter 1 of Volume 1 of Marx's Capital), "Can Machines Read? A QR Code Alphabet," and the still in progress "What My Computer 'Sees,'" which seeks to document and concretize some small part of the environmental impact of consumer digital culture, particularly in relation to social media--"At Or To Take Regret" responds to Rita Raley's call in her 2017 ELO Conference keynote to explore "concatenation," or the bringing together of disparate technical systems to disruptpositivist narratives surrounding the transformative potential of "the digital."

The title of my contribution to the Taroko Gorge Remix project, like the other contributions, has an anagrammatic relationship to Monfort's original title but includes a subtitle to draw attention to the issue of grammars and its relations with the historical and contemporary roles of coding in college writing instruction. Populating the variables in the code of Montfort's "Taroko Gorge" poetry generator with 34 words--the seven "FANBOYS," an acronym for the coordinating conjunctions (for, and, nor, but, or, yet, so) that is frequently taught and discussed in the first year writing course; "then"; the verb "to be"; eight pronouns; eight prepositions; and nine terms for describing types of nouns and noun phrases-- I created a potentially infinite set of statements that appear, syntactically, to be prescriptive grammar rules, but, semantically, are actually nonsensical.

Intended to draw a reader's attention to the question and definition of grammars in the teaching of college writing, and to the increasingly absurd status of the emphasis on prescriptive grammar rules when their functions can be, and in some instances, are being, replaced by machines, the piece also seeks to draw attention to the mostly hidden and openly exploited labor of adjunct higher ed writing instructors, to the ongoing hegemony of Standard Written English (SWE), the

dialect upon which prescriptive grammar is based, and to the "hard coding" of the SWE dialect into automated communications and educational tools.

Although grammar is often colloquially understood to refer to a set of rules applied to verbal language to ensure its "proper" use, such rules constitute for linguists a very small part of the universe of grammars. Descriptive Grammar, which is what contemporary linguistics defines as its object of study, analyzes the components and structure of a language in its actual use. In contrast, Prescriptive Grammar is "a collection of rules concerning what counts as socially acceptable and unacceptable language use" (Santorini/Kroch, "The Syntax of Natural Language"). This leads to a paradox for non-native speakers and writers of Standard Written English and an old but persistent divide in the theory and practice of college writing instruction: while the rules of descriptive grammar encompass and far exceed those of prescriptive grammar, for students whose home dialect is not Standard Written English, prescriptive grammar rules, which often occupy a large portion of the FYW course, end up being defined as the entire universe of grammars, thus rendering non-native speakers of Standard Written English to a place of permanent deficiency.

In terms of how all of this relates to my the larger research project, please refer to slides 13-19 and try to imagine what I might have to say about them ;).

From my perspective, the automation and, ultimately, commercialization of prescriptive grammar in tools such as those available from Grammarly.com, Microsoft, and Google present a unique opportunity to significantly compact or eliminate the time dedicated in the FYW course to the "writing instructions" related to prescriptive grammar, which was always already a type of "coding," and to refocus the course on "writing instruction." As a result, the course could become one that assists students in better understanding structures of power embedded in intersections of languages and technologies and the unique affordances of verbal language as a generative medium. Elit can be read and taught to make visible and critique the past misuses of prescriptive grammar instruction and the future perils of NLP and automated educational tools to verbal language and to the rights and uses of human laborers.

The digital divide is a very real fact. I am generally a complete pessimist and I mostly believe that old inequities are being coded into new media and, in the process, made even more invisible. But John Cayley's descriptions in his new book Grammalepsy of the reconfigurations of verbal language that are taking place as a result of new technologies make me believe that these may also present an opportunity for new kinds of critique and a re-thinking of what public education means, how it can be accessed, and the roles and functions of FYW courses in it.

DNA: A Networked Fiction Project

(As one of the "last" hypertext fiction projects DNA (2008-2018) may be the first "fully outsourced" epistolary novel)

johannah rodgers @what_is_writing · 25 Jul 2016

My recent contribution to @nickmofo's digital oulipian project is generated from

34 words: http://nickm.com/taroko_gorge/at_or_to_take_regret/

```
She if the but.

   if the impersonal —

She never the or.
So be.
I if the yet.

   if the personal proper plural mass —

He at the for.
For be.
You whether the yet.

   is the definite indefinite personal proper —

He then the for.
Then be.
He after the so.

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She after the for.
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Scott Rettberg &

↩   ⟲ 2   ♥ 6   ᶖᶖ

Wealth Begins With Human Need:
Remediating Chapter 1 of Marx's *Capital*

Machinations

Can Machines Read? A QR Code Alphabet
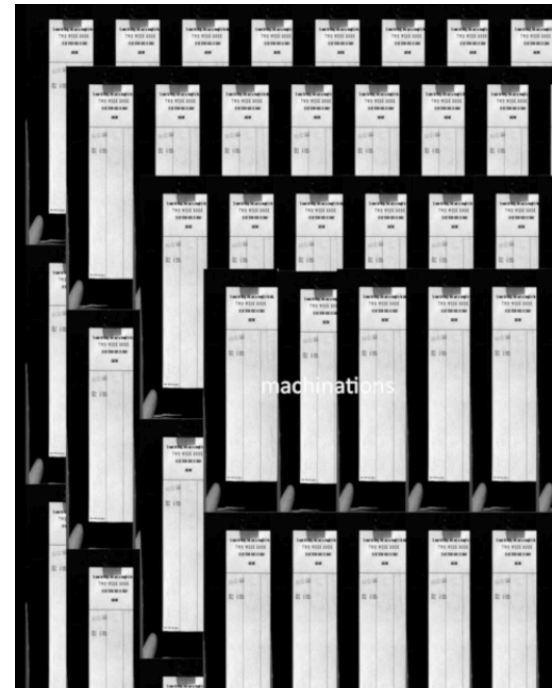
Documentation: What My Computer "Sees"
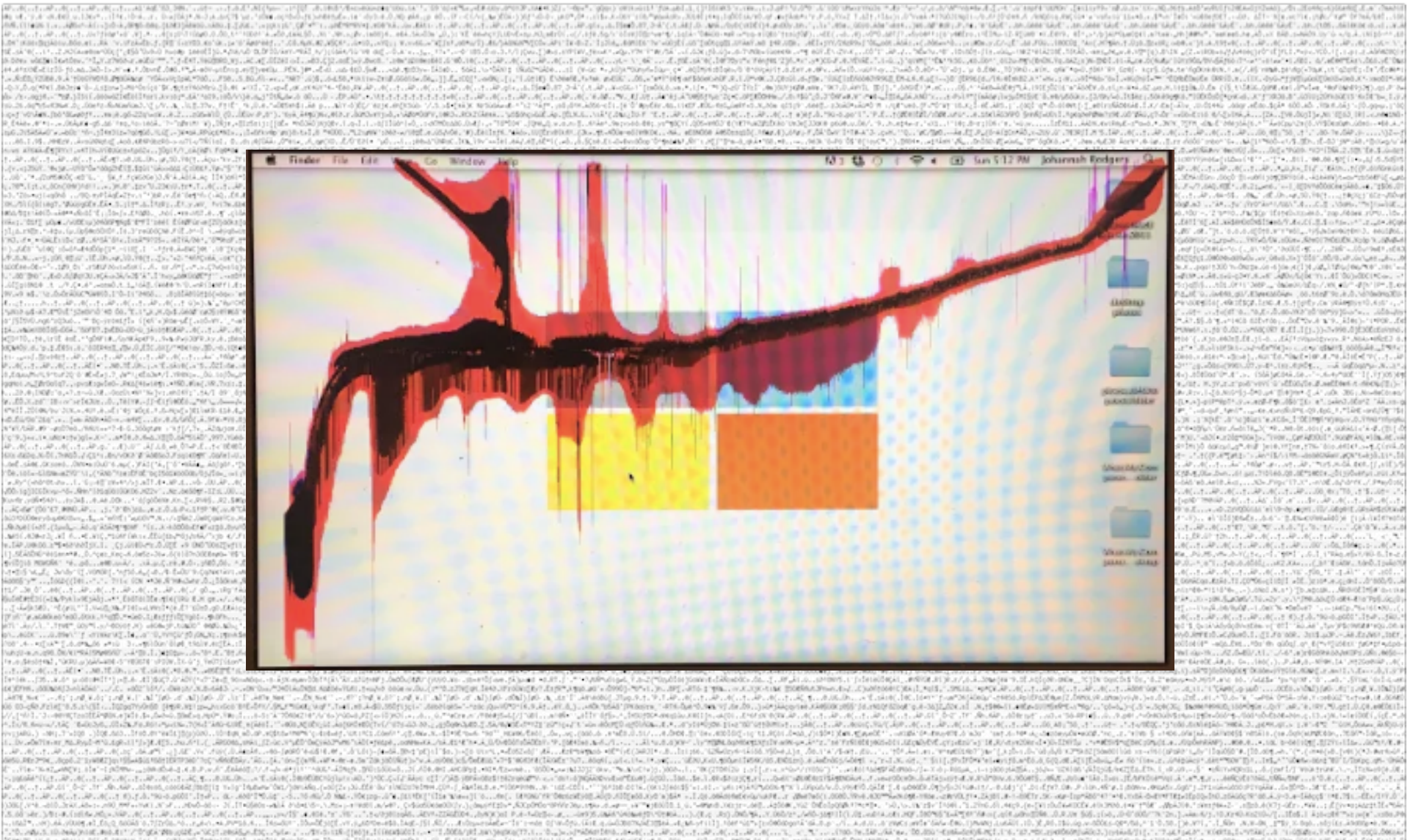
Populating the variables in the code of Montfort's "Taroko Gorge" poetry generator with 34 words--the seven "FANBOYS" (for, and, nor, but, or, yet, so); "then" ; the verb "to be"; eight pronouns; eight prepositions; and nine terms for describing types of nouns and noun phrases…

```
28  -->
29  <style type="text/css">
30  /* <![CDATA[ */
31  body {
32   background: #030303;
33   color: #FEFDFD;
34   margin: 0 24pt 0 24pt;
35   font-family: COURIER, serif;
36   font-size: 20pt;
37  }
38  div {
39   height: 16pt;
40  }
41  a {
42   color: #117;
43   text-decoration: none;
44  }
45  /* ]]> */
46  </style>
47  <script type="text/javascript">
48  var t=0;
49  var n=0;
50  var paths=0;
51  var above='I,you,he,she,it,we,one,they'.split(',');
52  var below='for,and,yet,but,or,yet,so,then'.split(',');
53  var trans='even,if,when,then,whether,after,at,never'.split(',');
54  var imper='is,if,is,if,is,if,is,if';
55  imper=imper.split(',');
56  var intrans='be,be,be,be,be,be,be'.split(',');
57  var s=','.split(',');
58  var texture='definite,indefinite'.split(',');
59  function rand_range(max) {
60   return Math.floor(Math.random()*(max+1));
61  }
62  function choose(array) {
63   return array[rand_range(array.length-1)];
64  }
65  function path() {
66   var p=rand_range(1);
67   var words=choose(above);
68   if ((words=='nouns')&&(rand_range(3)==1)) {
69    words='verbs '+choose(trans);
70   } else {
71    words+=s[p]+' '+choose(trans)+s[(p+1)%2];
72   }
73   words+=' the '+choose(below)+choose(s)+'.';
74   return words;
75  }
76  function site() {
77   var words='';
78   if (rand_range(2)==1) {
79    words+=choose(above);
80   } else {
81    words+=choose(below);
82   }
83   words+=' '+choose(intrans)+'.';
84   return words;
85  }
86  function cave() {
87   var adjs=('definite,'+choose(texture)+',indefinite,personal,impersonal,collective,proper,plural,mass,count').split(',');
88   var target=1+rand_range(3);
89   while (adjs.length>target) {
90    adjs.splice(rand_range(adjs.length),1);
91   }
92   var words='\u00a0\u00a0'+choose(imper)+' the '+adjs.join(' ')+' \u2014';
93   return words;
94  }
95  function do_line() {
96   var main=document.getElementById('main');
97   if (t<=25) {
98    t+=1;
99   } else {
100    main.removeChild(document.getElementById('main').firstChild);
101   }
102   if (n===0) {
103    text=' ';
104   } else if (n==1) {
105    paths=2+rand_range(2);
106    text=path();
107   } else if (n<paths) {
108    text=site();
109   } else if (n==paths) {
110    text=path();
111   } else if (n==paths+1) {
112    text=' ';
113   } else if (n==paths+2) {
114    text=cave();
115   } else {
116    text=' ';
117    n=0;
118   }
119   n+=1;
120   text=text.substring(0,1).toUpperCase()+text.substring(1,text.length);
121   last=document.createElement('div');
122   last.appendChild(document.createTextNode(text));
123   main.appendChild(last);
124  }
125  function poem() {
126   setInterval(do_line, 1200);
127  }
128  </script>
129   <title>At, or To Take Regret: Some Reflections on Grammars</title>
130  </head>
131  <body onload="poem()">
```

10

"At Or To Take Regret: Some Thoughts on Grammars" is a reflection and commentary on the first year college writing course as one site where humans and technologies (defined in the broadest sense) have always intersected.


```
She if the but.

   if the impersonal —

She never the or.
So be.
I if the yet.

   if the personal proper plural mass —

He at the for.
For be.
You whether the yet.

   is the definite indefinite personal proper —

He then the for.
Then be.
He after the so.

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Offering readers a space to consider the historical and contemporary roles of grammars and their relations to "coding" in the teaching and learning of college writing "At, Or To Take Regret" generates a potentially infinite set of statements that appear, syntactically, to be prescriptive grammar rules, but are semantically nonsensical.

By generating verbal statements that can be described as nonsensical commands, the piece seeks to draw attention to the functions and legacy of prescriptive grammar rules in the FYW course, labor and wage issues in higher-ed writing instruction, and the roles of digital tools in relation to both.

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Mapping the Universe of Grammars Across Disciplines

Linguistics

"In modern linguistics, we adopt a resolutely descriptive perspective concerning language. In particular, when linguists say that a sentence is **grammatical,** we don't mean that it is correct from a prescriptive point of view, but rather that it conforms to descriptive rules." ("The Syntax of Natural Language")

Descriptive Grammar

Prescriptive Grammar
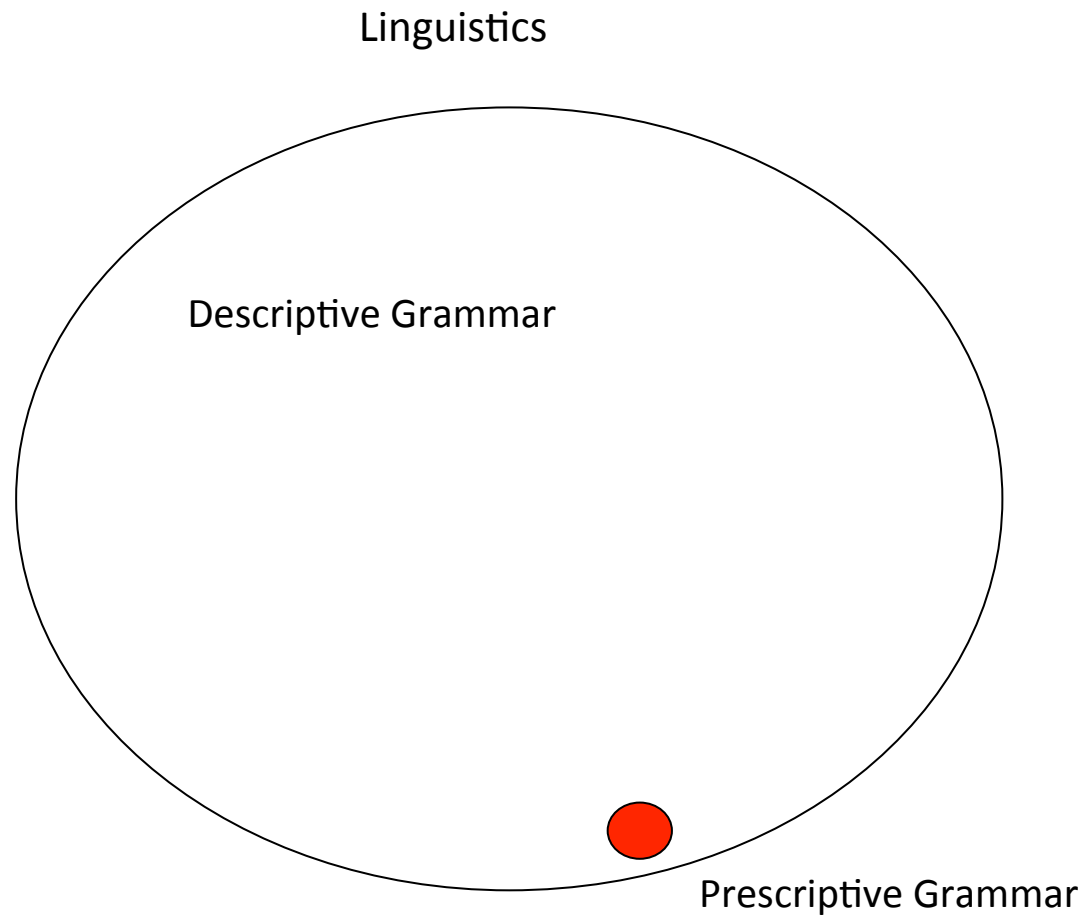
Mapping the Universe of Grammars Across Disciplines

Writing Studies

In Theory

In Practice

Descriptive Grammar

Prescriptive Grammar

Prescriptive Grammar

Descriptive Grammar
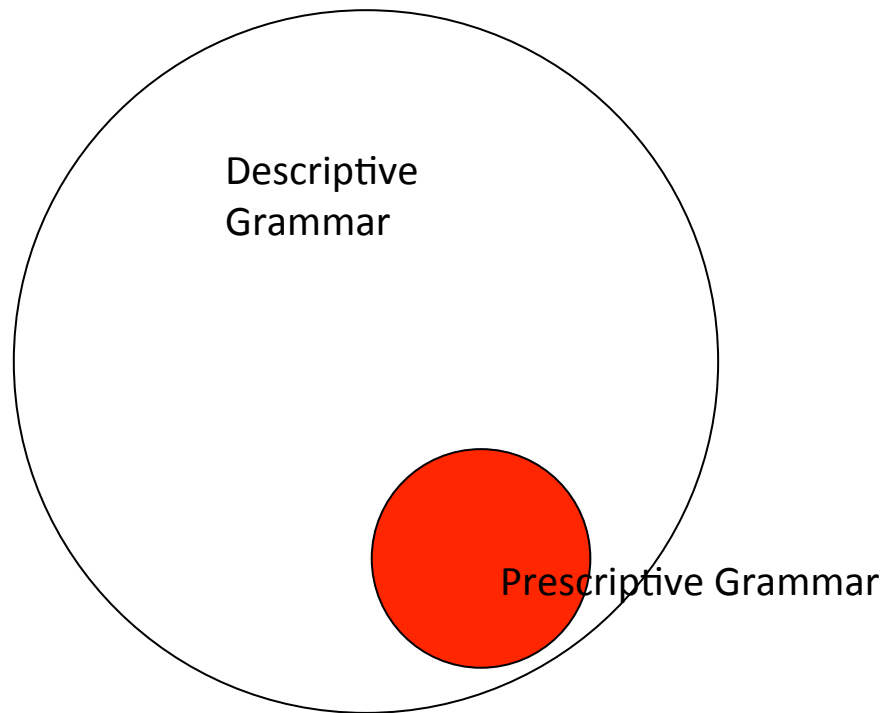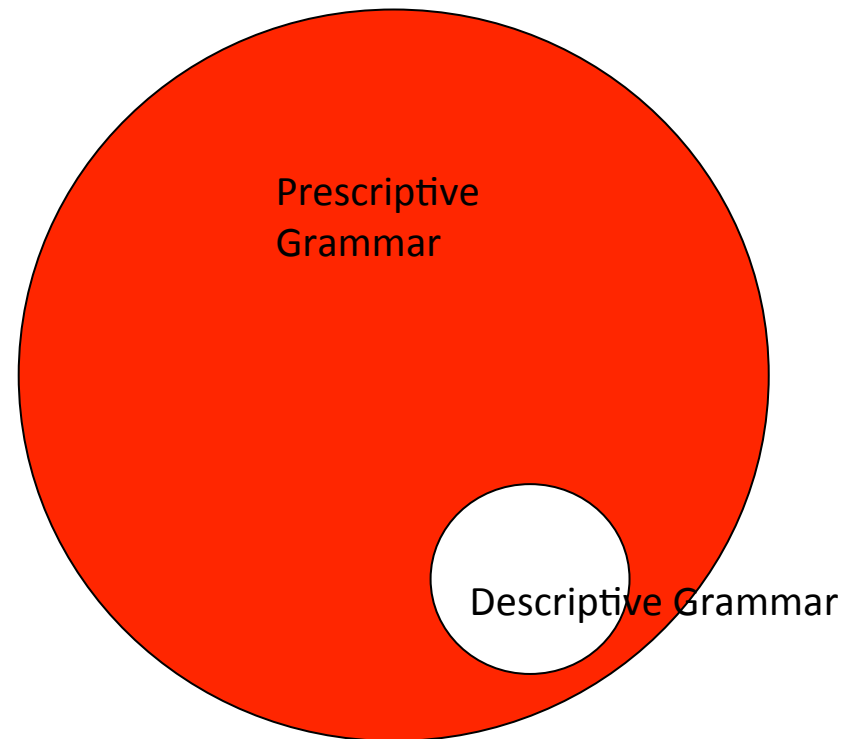
There Is Nothing "Natural" About Natural Language Processing

Human

Machine

Descriptive Grammar

Prescriptive Grammar

Prescriptive Grammar of Machine Coding Informed by SWE Prescriptive Grammar

Automates Writing of SWE and Generates Simulated Descriptive Grammar expressed via NLP tools
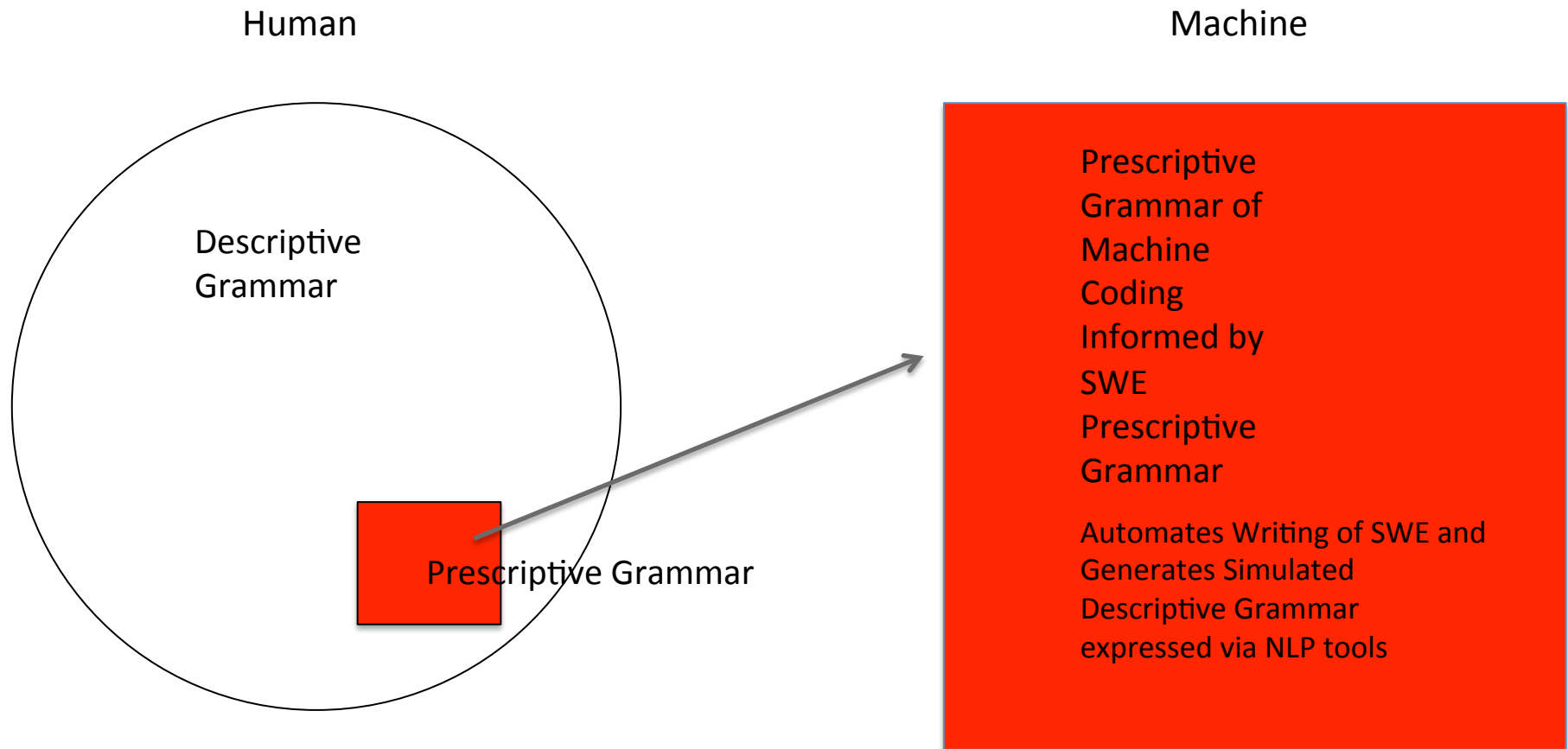
Some Very Big Questions: Where and How do the Disciplines of Linguistics, Writing Studies, and Computer Science Intersect? How do they Inform One Another? Where and How do they NOT Inform One Another? How Do Money Flows From Government and Private Sources Shape Their Relations and/or Non-Relations?

$

$

Linguistics +
(Psychology/
Philosophy/
Biology in so far as
they Relate to the
Study of Mind]

Writing Studies

$

$

Computer Science
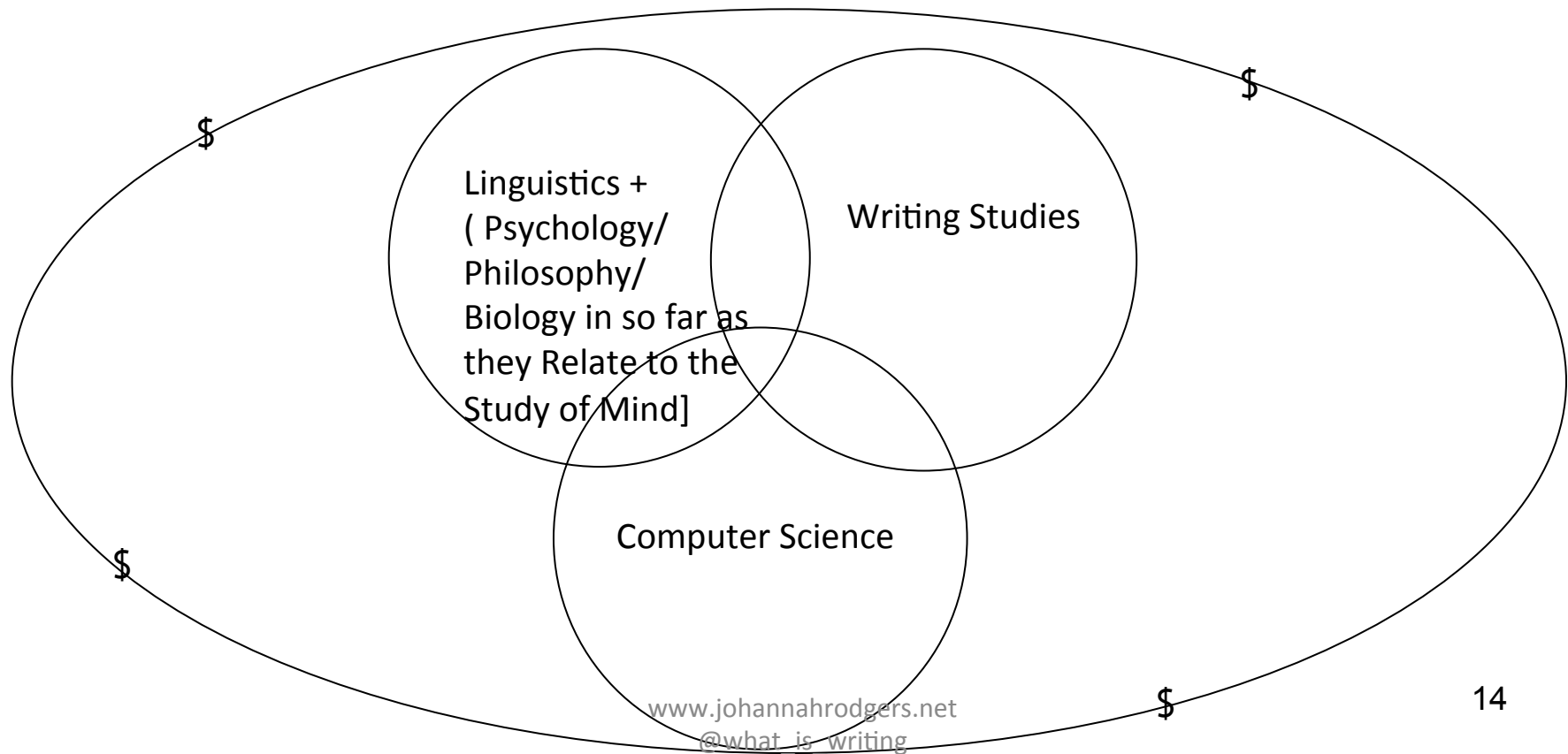
"How can we understand the ways that computer programming is changing our practices and means of communication? And how do we account for new modes and technologies in literacy?...Looking at programming from the perspective of literacy and literacy from the perspective of programming, I make two central arguments: 1/ programming shows us what literacy looks like in a moment of profound change; 2/ the history and practices of reading and writing human languages can provide useful comparative contexts for contemporary programming."

        -Annette Vee, *Coding Literacy: How Computer Programming is Changing Writing*, MIT UP, 2017.

I am Interested in Explore Intersections Amongst Definitions of Language and Technologies of Writing Instruction in the 19th c. and early 20th c.
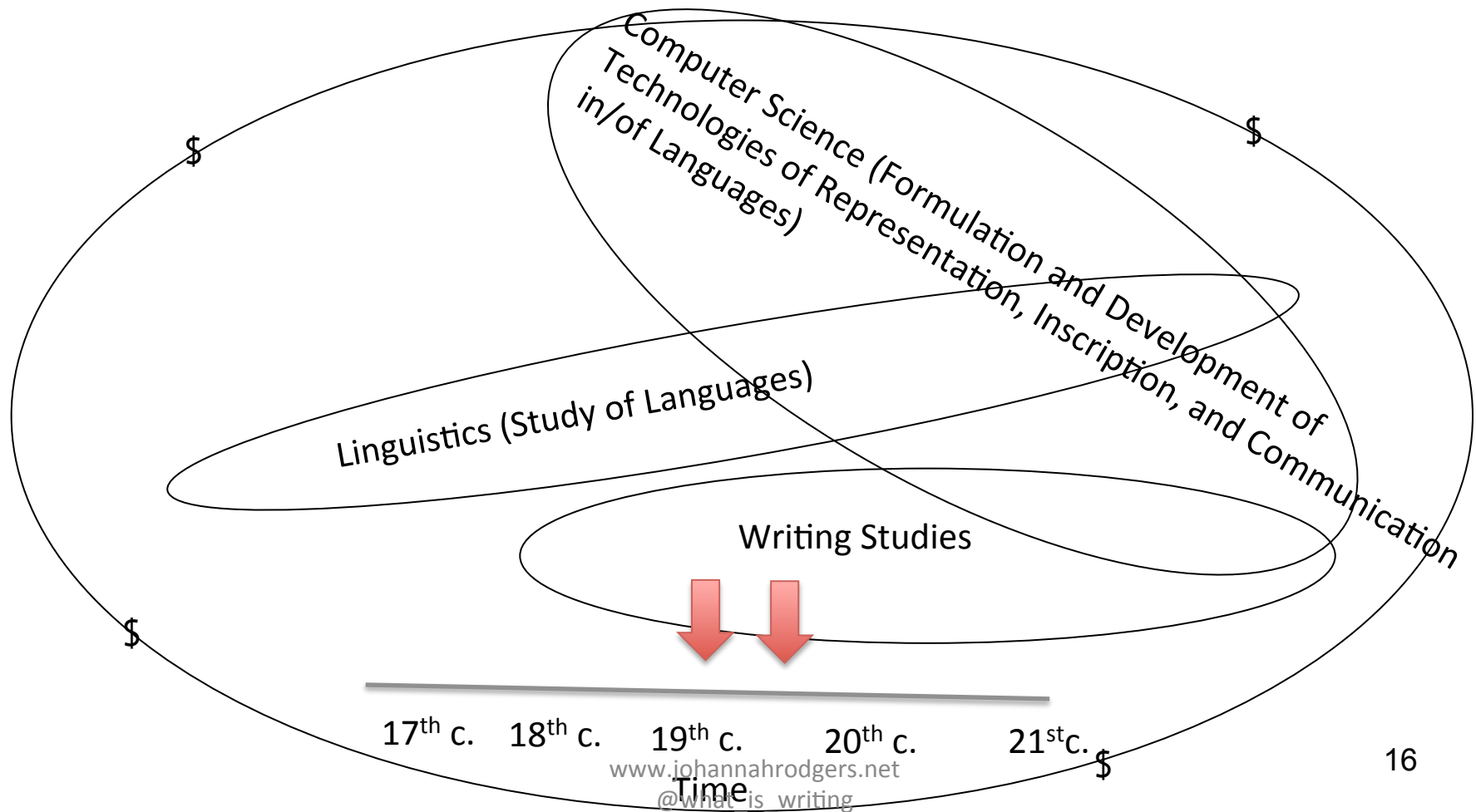
Computer Science (Formulation and Development of Technologies of Representation, Inscription, and Communication in/of Languages)

Linguistics (Study of Languages)

Writing Studies

$

$

$

$

$

17th c.   18th c.   19th c.   20th c.   21st c.

Time

16

```
She if the but.

    if the impersonal —

She never the or.
So be.
I if the yet.

    if the personal proper plural mass —

He at the for.
For be.
You whether the yet.

    is the definite indefinite personal proper —

He then the for.
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"At, Or To Take Regret" also seeks to suggest that while the value of SWE as a transactional human language in the 21stc. American workplace may be declining, its importance in existing Natural Language Processing tools and emerging Automated Education Tools is only growing.

G Suite Updates

This official feed from the G Suite team provides essential information about new features and improvements for G Su

New grammar suggestions in Google Docs launching to Early Adopter Program

July 24, 2018

We're introducing grammar suggestions in Google Docs along with a revamped interface for spelling and grammar review. The new features build on the existing spell check functionality to also highlight possible grammar errors in your text and help you correct them. This will help you spend less time checking and proofreading your work and make your writing easier to understand.

These features will initially launch as an Early Adopter Program (EAP). Find out more at g.co/GrammarEAP.

New grammar suggestions

When Docs detects a possible grammar correction, it will underline it in blue to indicate you might want to check it. You can right-click to see a suggested correction or dismiss the alert. Possible grammar errors will also show up when you run a spelling and grammar check through the tools menu.

New comprehensive language review interface

We've also made it easier to review all language suggestions for a given document with an updated the spelling and grammar check tool in Docs. To launch it, either use the "Tools" menu or right-click on a suggestion and select "Review more suggestions." The tool will then show you each suggestion and help you take action to correct any errors.

Verbal Language, Automation, and Labor

"Codework may be writing, but only in so far as writing was always already codework. … If we insist on conceiving of coding as a kind of writing … The questions become not: Is coding writing or is writing coding? But: In what way does human culture relate to the culture of machines?"
--John Cayley, "Coding as Practice" (2008)

Google Patents

Adaptive grammar instruction for commas

Abstract

Techniques are described for an automated grammar teaching system that displays sentences and allows a user to identify comma errors within the sentences, if any. The sentences may be presented as a set of sentences or a paragraph. When presented as a set, the sentences may employ similar or contrasting sentence structures to emphasize the application of the comma rules. The user may be asked to determine whether the sentences are correct or incorrect, to identify the locations of missing or extraneous commas, and in a sentence with a coordinating conjunction, to determine whether the conjunction joins two independent clauses. To guide the user, multi-level hints may be provided on request, and an incorrect user response may trigger the display of remediation information or a just-in-time hint. New sentences in the teaching system may be selected based on historical data maintained for the user.

Images (7)

Classifications

G09B19/04 Speaking

View 14 more classifications

US20150104764A1
US Application

Download PDF   Find Prior Art   Similar

Inventor: Robert Murray, Linda Schmandt, Ryan Schwiebert, Sara Hinton, Scott Fraundorf, Alison Huettner, Pete Shell
Current Assignee : Carnegie Learning Inc
Original Assignee: Apollo Education Group Inc
Priority date : 2013-10-15

Family: US (7)

Date	App/Pub Number	Status
2014	US14305164	Abandoned
Show 3 more applications		
2014-08-14	US14460167	Abandoned
2015-04-16	US20150104764A1	Application
2014	US14464616	Abandoned
2014	US14473519	Abandoned

Info: Patent citations (30), Non-patent citations (4), Cited by (8), Legal events, Similar documents, Priority and Related Applications
External links: USPTO, USPTO Assignment, Espacenet, Global Dossier, Discuss

Description

CROSS-REFERENCE TO RELATED APPLICATIONS; BENEFIT CLAIM
[0001] This application claims the benefit of U.S. Provisional Application No. 61/890,875, filed Oct. 15, 2013, which is hereby incorporated by reference in its entirety for all purposes as if fully set forth herein.
FIELD OF THE INVENTION
[0002] The present invention relates to teaching natural language punctuation conventions, and, more specifically, to an adaptive grammar teaching system configured to train users on identifying and correcting punctuation errors within natural language sentences.
BACKGROUND
[0003] Natural languages are spoken languages (such as American English), which have grammar rules governing the composition of the natural language. There are stylistic conventions that apply to the written form of a natural language, which, unlike natural language per se, must be taught. When a person has not learned the proper stylistic conventions for written language, the student may encounter difficulty in communicating in writing, particularly in formal documents. For example, it may be particularly difficult for a person who does not understand the punctuation

Claims (20)

What is claimed is:

1.   1. A computer-executed method comprising:

displaying a graphical user interface that is generated by an automated grammar teaching system that is executing, at least in part, on a computing device;

depicting a set of natural language sentences on the graphical user interface, wherein the set of natural language sentences have differences in grammatical structure affected by one or more comma rules;

receiving input information, from a user, which indicates whether one of the set of natural language sentences includes a comma error;

determining, by the automated grammar teaching system, whether the input information is correct;

in response to determining that the input information is incorrect for

Media Economies and the "Value" of Words

Written forms can be considered "the circulating medium, the money" of the fundamental auditory symbols. As visual symbols "they are a convenient substitute for the economic goods and services" of spoken ones." (Sapir, *Language* (1921))

An estimated "3.4 trillion words, roughly the equivalent to the entire contents of the Library of Congress" are posted globally to the web each day (Clive Thompson, "Write from the Start" (2015)).
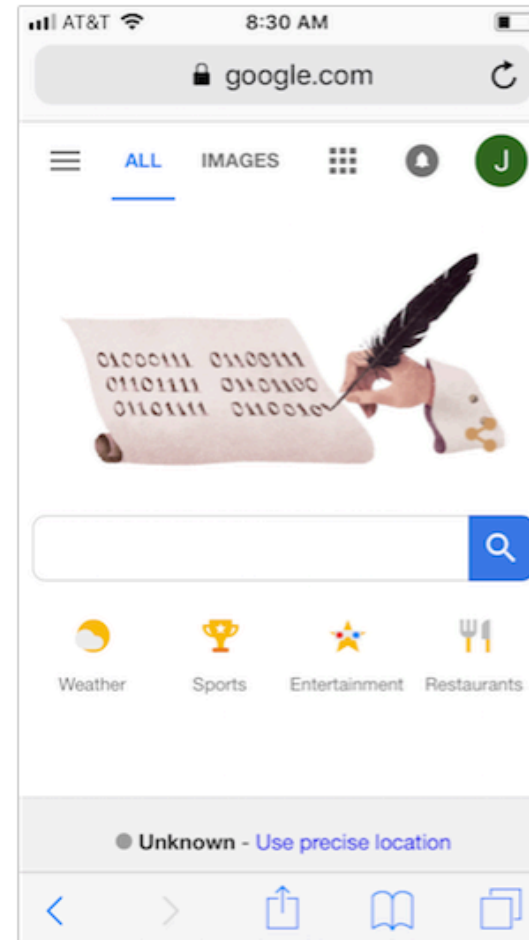
SWE.as.Code.Leibniz.Google.Doodle.July.1.2018.PNG

Some Propositions I'd Like to Explore

1/ that verbal language, like every natural resource, has been productized and commodified and continues to be so in new and unique ways

2/ that sometime in the mid-20th century more money and resources were dedicated to teaching machines to read and write than to teaching humans to read and write.

Working Bibliography

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