QUICK REFERENCE GUIDE TO CQPweb SEARCHES AT GU

Sakol Suethanapornkul and Amir Zeldes Department of Linguistics, Georgetown University January 21, 2015

This reference outlines a brief overview of the most commonly searched features of CQP Query Syntax in the CQPweb interface at Georgetown University. Query expressions are entered in a query field on the "Standard query" page available from the menu on the left in each corpus. For a list of corpora, see <u>http://corpling.uis.georgetown.edu/cqp/</u>.

Basic word searches – Simple query mode

By default, the search query mode is set to **CQP syntax**. For basic word form searches, set the Query mode to **Simple query** (ignore case)

- This reference primarily deals with CQP mode. In Simple query, to search for a word or sequence of words, enter the word into the query field and click Start Query button, for example: dry or even though. For more information on simple query syntax, click the link next to the query mode box.

Running CQP mode queries

Lemma and part of speech (POS) searches

- Use [word="word"] to search for a particular word.
 [word="take"] → find all instances of exactly the word "take".
- Use [lemma="word"] to search for a lemma, including inflected forms.
 [lemma="dry"] → dry, dried, drying, dries...
- To search for part of speech tags, use [pos="POS"]
 [pos="JJ"] → find all adjectives. Most (but not all) corpora use the extended Penn Treebank tag set for a list see here: <u>http://corpling.uis.georgetown.edu/ptb_tags.html</u>

or the list at the end of this manual.

Searches are case-sensitive. For example, [word="Take"] and [word="take"] produce different results.

Operators in searches

- Use operators to search for patterns:

- . The dot operator matches any character:
- d.g \rightarrow dog, dig, dug
- * matches the preceding character zero or more times. of* \rightarrow o, of, off, offf...
- + matches the preceding character once or more: $of+ \rightarrow of, off, offf, offff...$
- ? makes the preceding character optional:
 [word = "honou?r"] → honor, honour
- (|) searches for two alternative forms:

[word="be(tter|st)"] → better, best $[lemma="(slew|slayed)"] \rightarrow find slayed or slew$ defines a range of characters. [] [aeiou] \rightarrow any vowel, e.g. [word="d[aeiou]g"] \rightarrow similarly, a capital letter A to Z [A-Z] \rightarrow a sequence of numbers (one or more, using the + from above) [0-9]+For example, you can combine these options like this: $[word="[A-Za-z]+-[A-Za-z]+"] \rightarrow find hyphenated compounds$ defines the opposite of a range. [^] [^aeiou] → anything but a vowel a string of only non-lower case characters [^a-z]+ → You can use these like this:

[word="[^aeiou]+"] \rightarrow find a word that does not begin with a vowel {n,m} specifies a number range for repetitions

 $[word="a{3,4}"] \rightarrow find aaa or aaaa.$

- To treat operators as a real character, use $\ in front of the operator.$ [word="\?"] \rightarrow find a "?" in the text.

Combining and negating annotations

- Combine search terms using &:
- [pos = "JJ" & lemma = "dry"] → find all instances of "dry" as an adjective.
- Use != for a negative match:
 [pos="JJ" & word !=".*able"] → find adjectives that <u>don't</u> end with *-able*.
 [pos= "NNS" & word!=".*s"] → find irregular noun plurals.

Word sequence searches

Combine search terms to look for a string of words.
 [word="a"] [word="lot"] [word="of"] → find the phrase a lot of.

Use operators on tokens or annotations to search for patterns. The same operators that apply to characters can also be placed after each word:
 [word="a"] [pos="JJ"] * [word="lot"] [word="of"] → find a (ADJ)

lot of with any number of adjective (a great whole lot of...) $[pos="JJ.*"] \{2, 4\} [pos="NN.*"] \rightarrow find 2 to 4 consecutive adjectives before a noun$

Markup searches

- Use XML markup for searches in corpora that support markup. Some corpora have sentence segmentations:

 $\langle s \rangle$ [word="[Nn]o"] \rightarrow find a sentence that begins with 'no'.

- Others have paragraphs (p) or other mark up:

 $\langle p \rangle [pos="V.*"] \rightarrow$ find a paragraph that begins with a verb.

| Tag | Description | Example |
|---------|--|-----------------------------------|
| CC | coordinating conjunction | and |
| CD | cardinal number | 1, third |
| DT | determiner | the |
| EX | existential there | there [is] |
| FW | foreign word | d'hoevre |
| IN | preposition, subordinating conjunction | in, of, like |
| IN/that | that as subordinator | that |
| JJ | adjective | green |
| JJR | adjective, comparative | greener |
| JJS | adjective, superlative | greenest |
| LS | list marker | 1) |
| MD | modal | could, will |
| NN | noun, singular or mass | table |
| NNS | noun plural | tables |
| NP | proper noun, singular | John |
| NPS | proper noun, plural | Americans |
| PDT | predeterminer | both [the boys] |
| POS | possessive ending | [friend]'s |
| PP | personal pronoun | I, he, it |
| PP\$ | possessive pronoun | my, his |
| RB | adverb | however, usually, naturally, here |
| RBR | adverb, comparative | better |
| RBS | adverb, superlative | best |
| RP | particle | [give] up |
| SENT | Sentence final punctuation | .!? |
| SYM | Symbol | / = * |
| ТО | infinitive or prepositon 'to' | to |
| UH | interjection | hey, huh, uh |
| VB | verb be, base form | be |
| VBD | verb be, past tense | was, were |
| VBG | verb be, gerund/present participle | being |
| VBN | verb be, past participle | been |
| VBP | verb be, sing. present, non-3rd | am, are |
| VBZ | verb be, 3rd person sing. present | is |
| VH | verb have, base form | have |
| VHD | verb have, past tense | had |
| VHG | verb have, gerund/present participle | having |
| VHN | verb have, past participle | had |
| VHP | verb have, sing. present, non-3d | have |
| VHZ | verb have, 3rd person sing. present | has |

Extended Penn Treebank part-of-speech (POS) tags

| VV | verb, base form | take |
|------|---------------------------------|-------------|
| VVD | verb, past tense | took |
| VVG | verb, gerund/present participle | taking |
| VVN | verb, past participle | taken |
| VVP | verb, sing. present, non-3d | take |
| VVZ | verb, 3rd person sing. present | takes |
| WDT | wh-determiner | which |
| WP | wh-pronoun | who, what |
| WP\$ | possessive wh-pronoun | whose |
| WRB | wh-abverb | where, when |
| ~~ | Opening quotation marks | 1.11 |
| " | Closing quotation marks | 1.11 |
| (| Opening brackets | ({ |
|) | Closing brackets |)} |
| , | Comma | , |
| : | Other punctuation | - ; : |