Overview

The work is a constructive attempt by the authors to build a tool facilitating the applicability of morphological analysis customizable for applications compared to existing tools which present less flexible output as solution.

It identifies some of the shortcomings and discrepancies of existing morphological analyzers.

The main features advocated by the author about the tool are

- the characteristic of choice of detail output for a particular analysis resulting in performance gains.
- Concept of 'agglutinative' and 'fusional' affixes refining affix combination rules resulting in reducing lexicon size and speedier analysis. This aspect is an inclusion from their earlier work, which is previously published.
- Identify numerous 'inconsistencies' in some existing tools due to error in the encoding of the lexicons for affixes.
- They introduce certain other features such as unprecedented analysis of 'Run-on word'; using information from partially diacritized text which have been used by one other tool

Paper mainly describes the technical aspect and functioning of the Sarf Application to choose appropriate analysis based on user defined choices. The main novelty aspect of the techniques for analyzing words based on 'agglutinative and fusional' affixes has been covered by the author in previous publication.

Paper doesn't provide conceptually and linguistically motivated reasoning behind the application of a certain methods to obtain their solution. Not much theoretical and descriptive insight about morphological concepts

Whereas on the one hand they improve upon and combine many of the advantages of existing tools they didn't include a key aspect of morphological analysis which is disambiguation of the analysis provided some existing analysers such as MADAAMIRA.

Paper needs to improve upon the overall presentation. It lacks professionalism with a clutter of spontaneous examples, which could be more organized. Also includes some mundane details such as about the architecture of the system, which could be omitted.

Specifics:

- Paragraphs don't sometimes connect and lack coherence such as in section 2.2

- Poor presentation of the Arabic script and its Romanized form: quite

unprofessional.

- Poor formatting of the section heading without variation in font sizes for subsections. Also poor organization of section heading: Describing the various aspects of their tool should be organized under one large section with various subsections for each feature described.

- Related works section should after introduction rather than towards the end.

- Lack of illustrative examples; only refers back to the same table to explain their point of view which remains unclear

- Diagrams missing key details and lack illustrative power to explain the concept clearly.

- 'Solution construction' section (2.2) is very ambiguous and unclear. Lacks clarity in explaining the working of their application. E.g. it lacks clarity as to how the solution is reached from the DAG and Trie structure. Paragraph 2 needs rephrasing.

- Missing gloss for the Arabic script in the given examples in text makes grasping the concept difficult

- The text has many typos e.g. 'the was' instead of 'there was' page 9 line 9; 'Sarfover' missing space in page 20; "and compares that" on page 23 Sec 7.5, instead of "and compared that"; to name a few examples.

- English used is sometimes improper and not of a quality standard. E.g. the sentence p15, para 5, "It checks that the sequence of non-diacritic letters, ignoring the diacritics between them, are equal"

- The purpose of the "diacritic-aware consistency check is unclear". No procedure is outlined how it is used to discard certain diacritic as invalid.

- Tables distant from the referenced text.

- Conclusion quite brief: needs more detail and conclusive deductions about the work