

----- REVIEW 1 -----

SUBMISSION: 8

TITLE: On Local Keys, Modulations, and Tonicizations: A Dataset and Methodology for Evaluating Changes of Key

AUTHORS: Nestor Napoles Lopez, Laurent Feisthauer, Florence Leve and Ichiro Fujinaga

----- Contribution -----

SCORE: 4 (excellent)

----- Relevance -----

SCORE: 3 (relevant)

----- Readability and paper structure -----

SCORE: 3 (excellent)

----- Overall recommendation -----

SCORE: 1 (accept)

----- TEXT:

While the general approach and detailed coverage of the chosen datasets seems excellently handled and rigorous, with results of the evaluation of the various algorithms clearly presented, the paper makes no attempt to relate the work to the central topic of DLfM and does not discuss how the work might be used in a digital-library context.

For example, it is not clear how these methods for reproducing historical musical interpretations (mostly from 19th-century Russia) of the somewhat subjective (as the authors admit) matter of local modulations within a larger tonal context, is likely to be of much help in providing useful musical surface-descriptions that might find use in a digital library. (That is not to say that such a use does not exist; it is just that the case is not made in this paper.)

Apart from this, if there turns out to be space in the conference schedule, the quality of the paper and its presentation would certainly make it acceptable in itself as an interesting contribution to digital musical analysis methods. But it is hard to see how it might be modified to provide the music-library perspective that is lacking in this version without exceeding the length limit.

----- Accept as short paper (for long paper submissions only) -----

SELECTION: no

----- Accept as TROMPA Challenge paper (proceedings track submissions only) -----

SELECTION: no

----- REVIEW 2 -----

SUBMISSION: 8

TITLE: On Local Keys, Modulations, and Tonicizations: A Dataset and Methodology for Evaluating Changes of Key

AUTHORS: Nestor Napoles Lopez, Laurent Feisthauer, Florence Leve and Ichiro Fujinaga

----- Contribution -----

SCORE: 3 (good)

----- Relevance -----

SCORE: 3 (relevant)

----- Readability and paper structure -----

SCORE: 2 (some improvements required)

----- Overall recommendation -----

SCORE: 1 (accept)

----- TEXT:

This is a nice contribution, seeking to bridge local key estimation efforts in MIR and modulation/tonicization annotations contributed in various well-established music-theoretical works. The resulting dataset with modulation and tonicization annotation encodings will be useful for further reuse by the community, and for the evaluation, the authors include both baselines at varying challenge levels, as well as various contemporary automated methods.

I would therefore in general be happy to see this work represented at DLfM, but do have a few minor comments and suggestions for further improvements:

- is Figure 1 truly necessary, given that this work is not actually about key profile distributions?
 - particular choices were currently made (and justified) in encoding the music-theoretical annotation (page 5, footnote 3). However, to what extent may the current dataset still be enriched with encodings of alternative annotations from the book fragments? That will both give a more accurate representation of what information was present in the books, while it may also help in having more gold-standard data for future work focusing on incorporating ambiguity awareness in the evaluation procedure.
 - in Section 4, may 'weighted' be grammatically more accurate than 'weighed'?
 - I have some issues with Figure 4:
 - the vertical lines in the colored plots do not seem justified, as there is no connected relation between the different datasets
 - furthermore, one could argue that the visual representation is currently redundant to the information in the tables. May it rather be more insightful to have the visual representations giving some hints on observed variability on the metrics (e.g. through boxplots)? In such a situation, more than 4 subfigures may be needed for a clear representation, but some space in the paper may be won by e.g. removing Figure, as suggested above.
 - what do the bolded performance numbers in the table exactly indicate?
- Accept as short paper (for long paper submissions only) -----
 SELECTION: no
- Accept as TROMPA Challenge paper (proceedings track submissions only) -----
 SELECTION: no

----- REVIEW 3 -----

SUBMISSION: 8

TITLE: On Local Keys, Modulations, and Tonicizations: A Dataset and Methodology for Evaluating Changes of Key

AUTHORS: Nestor Napoles Lopez, Laurent Feisthauer, Florence Leve and Ichiro Fujinaga

----- Contribution -----

SCORE: 3 (good)

----- Relevance -----

SCORE: 4 (highly relevant)

----- Readability and paper structure -----

SCORE: 3 (excellent)

----- Overall recommendation -----

SCORE: 1 (accept)

----- TEXT:

This paper poses the difficult question of automated analysis of the musical phenomenon of modulation. At the crossroads of computational musicology and MIR, it proposes a methodology based on existing tools and algorithms in an attempt to identify their limitations and improve their results.

The theme and method are clearly stated, and the results are real and lead to a conclusion that is all the more convincing that it takes into account the very limits of this type of automation, which is due to the multiplicity of possible musical analyses from one analyst to another starting from the same piece.

A few remarks:

- figure 1 is not explicit enough and/or perhaps not useful;
- specify whether the analysis of figure 2 is by the theorist (Rimsky-Korsakov) or by the authors: for the thoroughness of the demonstration, it would be better to choose an example analyzed by the theorist himself;
- more generally on the subject of datasets choices one wonders about the relevance of supplementing these corpora with pieces analyzed by the authors: depending on the degree of musical expertise of the authors, would this not risk distorting the results?
- a demonstration during the presentation of the functioning of the various stages of the methodology would be appreciated.

----- Accept as short paper (for long paper submissions only) -----

SELECTION: no
----- Accept as TROMPA Challenge paper (proceedings track submissions only) -----
SELECTION: no

----- REVIEW 4 -----

SUBMISSION: 8
TITLE: On Local Keys, Modulations, and Tonicizations: A Dataset and Methodology for
Evaluating Changes of Key
AUTHORS: Nestor Napoles Lopez, Laurent Feisthauer, Florence Leve and Ichiro Fujinaga

----- Contribution -----
SCORE: 4 (excellent)
----- Relevance -----
SCORE: 2 (possibly relevant)
----- Readability and paper structure -----
SCORE: 3 (excellent)
----- Overall recommendation -----
SCORE: -1 (reject)

----- TEXT:

This is a very well-written paper. As a non-specialist on this topic, the narrative is easy to follow, and the language used is good. The paper is complete in its references to earlier work (especially §1.3), and its methodology is clear and well-organised. The data are available and documented on github.

The paper has a high relevance for the MIR community, but unfortunately less to the DLfM audience. To fit the themes of the DLfM conference, attention should be given to the applications of the experiment described. Question which could be addressed to achieve this: How can Music Digital Libraries benefit from the results? Is it useful to search collections based on local key characteristics, and if yes, how? Which (other) digital library collections can be identified for application of the method?

----- Accept as short paper (for long paper submissions only) -----
SELECTION: no
----- Accept as TROMPA Challenge paper (proceedings track submissions only) -----
SELECTION: no