

345 loops were selected from GMD.

Sessions with Luis Tabuenca <[luistabuencaf@gmail.com](mailto:luistabuencaf@gmail.com)>:

1. After the first 2 sessions with Genis and Ignasi, we suspect that the styles of dualisations may vary a lot among participants. We found Luis Tabuenca, a former drummer in residency at Phonos and current artist residence at Fabra i Coats; he could provide 4 hours everyday Mon-Fri in an entire week to do the experiment, so instead of just data collection, we replanned the sessions for Luis, starting with a repetition 'pilot' session, and deciding what the experiments could be after the 'pilot' session.

Entire Set to Test: 345 2-Bar Loops				
Set T1 - 72 Loops (Genis)	Set T2 - 72 Loops (Ignasi)	Set T3 - 72 Loops (No Attendees)	Set T4 - 72 Loops (No Attendees)	Set T5 - 57 Loops (No Attendees)
Repetition 1 Session: √	Repetition 1 Session: √			
Repetition 2 Session: x Repetition 3 Session: x	Repetition 2 Session: x Repetition 3 Session: x	Repetition 1 Session: x Repetition 2 Session: x Repetition 3 Session: x	Repetition 1 Session: x Repetition 2 Session: x Repetition 3 Session: x	Repetition 1 Session: x Repetition 2 Session: x Repetition 3 Session: x

2. Pilot Test (3Hours): We selected 72 2-bar loops and repeated them 3 times and randomized their order and asked Luis to dualize them.

We did not tell Luis about the repetitions → After the experiment Luis noted that he did notice that there were repetitions.

3. Luis said that he can provide us with two versions of the dualizations: a simple dualization vs a more complex one. As a result we decided to test the remaining examples twice, once asking for a simple dualization and the second time asking for a more complex one. For part two, we tested the remaining loops ( $345-72=273$ ). However, this time we only asked for two repetitions.

To do so we, prepared 4 session (A, B, C, D) for each which we selected 68 loops. In each session, we first presented the 68 loops (A1, B1, C1, D1) and asked for a simple dualization. While, in the second run of the session (A2, B2, C2, D2) we used the same 68 loops as the first half and asked for a more complex dualizations

345 tracks

72			
68	68	68	68

<sup>x3</sup>  
Repetition

A

B

C

D

1 sample A1

B1

C1

D1

2 complete A2

B2

C2

D2

### Sessions with other participants:

5 individual drummers, 8 hours more:

1. 2 data collection sessions (1 hour each) in the beginning with each 72 randomised tracks from the 345 tracks. We found out the styles of dualisations may vary a lot among participants, so we redesigned the experiment and focused on repetitions.
2. 4 repetition sessions (1 hour each) with individual drummers. 24 tracks extracted from Luis' repetition session with a balanced selection of genre. Each track repeated 3 times and randomised.
3. 2 sessions with Pau, doing A1, A2 with the simple/complex dualisations.

Entire Set to Test: 345 2-Bar Loops				
<b>Set 0 - 72 Loops (Luis)</b>  Repeated 3 times randomly without letting him know about repetitions  <div><b>24 Samples from Set 0 (Pau, Genis, Ignasi, Morgan)</b>  Repeated 3 times randomly without letting him know about repetitions</div>	<b>Set A - 69 Loops (Luis, Pau)</b>  2 repetitions:  I. For simple dualization  II. For complex dualizations	<b>Set B - 68 Loops (Luis)</b>  2 repetitions:  I. For simple dualization  II. For complex dualizations	<b>Set C - 68 Loops (Luis)</b>  2 repetitions:  I. For simple dualization  II. For complex dualizations	<b>Set D - 68 Loops (Luis)</b>  2 repetitions:  I. For simple dualization  II. For complex dualizations

Tasks to be done before meeting with Sergi Next week:

1. Finalize the exports (processing) the collected data
2. Create excel documents of the questionnaires  
<https://docs.google.com/spreadsheets/d/1J06loxUv9V7FKr4wQRIS0VmEttcDq3Q5Vlyh3DQXzvw/edit?usp=sharing>
3. Update the log above
4. Make sure you translate the interviews  
[https://docs.google.com/document/d/1OCOU\\_vekYhSrodlcaJwtoqkb7IF3M-aX4z7przGI4A/edit?usp=sharing](https://docs.google.com/document/d/1OCOU_vekYhSrodlcaJwtoqkb7IF3M-aX4z7przGI4A/edit?usp=sharing)

## **PRESENTATION STUFF**

3 Main Questions:

**Q1. Does dualization exist? Is this a doable/meaningful task**

Use interviews / questionnaires

**Q2. Is there correlation between dualisations of the **same** drummer?**

If we ask a drummer to dualize a pattern multiple times at random, how consistent will these dualizations be? (Intra-drummer consistency of dualizations)

Compare results computationally

- Cosine distance
- Distances from Daniel's paper
- Other distances like Hamming?

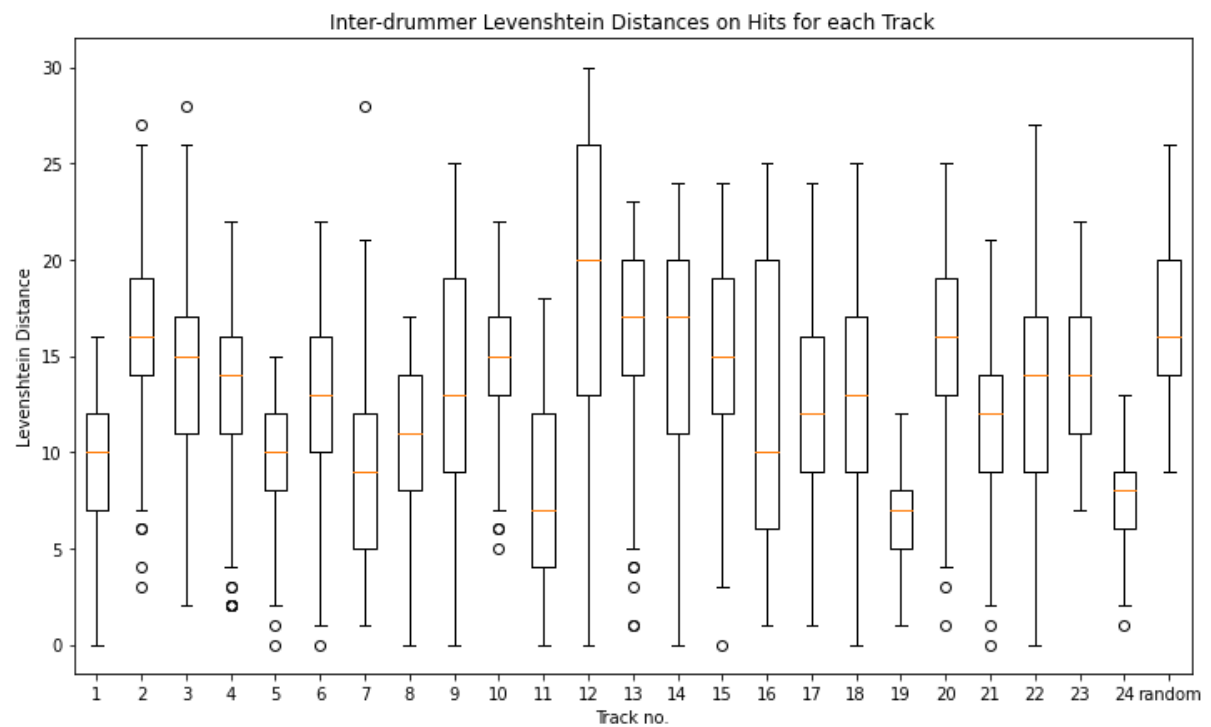
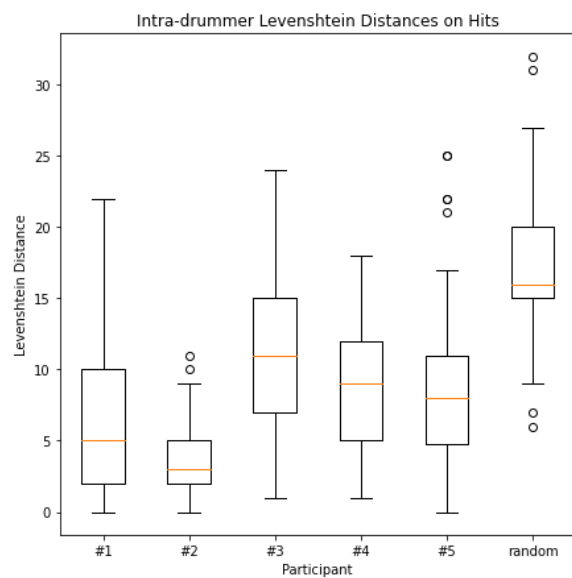
Predictions from the drummers in interviews (Views on what they think they did with different repetitions)

**Q3. Is there correlation between dualisations of the **different** drummer**

If a single pattern is given to multiple drummers for dualization, how consistent will these dualizations be? (Inter-drummer consistency of dualizations)

- Look at histogram of responses rather than the averages
- Agreement indices for inter-drummer distance analysis (for 123 representation for example) → Maybe we should ask Juan Gomez
- huffman coding
- [https://en.wikipedia.org/wiki/Jaccard\\_index](https://en.wikipedia.org/wiki/Jaccard_index)
- Slide 41 → use distance rather than correlation
- Focus on describing the data rather than proving/disproving a hypothesis
- Check and see to what extent velocity is used for encoding information (use simple /complex variation of velocity ) → compute stdev of velocity of each pattern and each drummer
- We should also look at the evolution of dualizations for a given pattern
- Influence of orchestration

## Levenshtein Distance



- Jaccard Distance on matrix or list
  - Krippendorff's alpha and Spearman's Rank also
- Add metrical weight profile (rhythmic syncopation awareness)
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