

# Adaptasi Positional Encoding pada Arsitektur Transformer untuk Sintesis Notasi Gamelan yang Koheren dan Terkendali

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## Previous Work

## Decoding PDF files

Ayek-Ayaken **Nem**, lászlónő pethet nem.

804

(6)	•	5	•	6	•	5	•	6
	•	2	•	1		•	3	•
[	3	2	3	5	"	2	3	5
5	6	5	3		5	6	5	3
5	6	5	3		2	1	3	2
3	2	3	5	)	3	2	3	5

Sijmen

9 (6) 1 (6)

Unicode Code (Hex)	Visual Character	ASCII/Unicode Value (Dec)	Glyph ID (GID)
U+0628		32	3
U+0629	)	41	26
U+062B	+	43	28
U+063D	-	45	30
U+0640	@	64	49
U+0642	B	66	51
U+0643	C	67	52
U+0645	E	69	54
U+0646	F	70	55
U+0648	H	72	57
U+0649	I	73	58
U+064A	J	74	59
U+064C	L	76	61
U+064D	M	77	62
U+064F	O	79	64
U+0650	P	80	65
U+0651	Q	81	66
U+065B	R	91	76
U+065D	S	93	78
U+065E	T	94	79

## Notasi gamelan Ayak-ayakan Nem Slendro

pt. Nem

## Cmap font balungan.

```
##Page 0##
Ayak-Ayakan Nem, laras sléndro pathet nem
Buka
M@ -+ L) -+ M)^ -+ L) -+ M)^
-+ P) -+ O)^ -+ Q) -+ P)^ M+- L) J+ L@]
[ + J + I) + J + L)^ + I + J) + L + M)^ + L + J) + L + M)^ + J + L) + J + I @
L M) L J)^ L M) L J)^ I H) I F)^ I H) I J@]
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C B) C E)^ C B) C E)^ I J) L J)^ L I) J L@ ]
Suwuk
F F) E F)^ J I) H F@]
```

Figure: Notasi ayakan decoded

# Previous Work

## Plotting Structure

Seri pada **Tutur**, lantunan slendro patet sangga

Buka kembang



Figure: Notasi Gamelan

Javanese Gamelan Structure

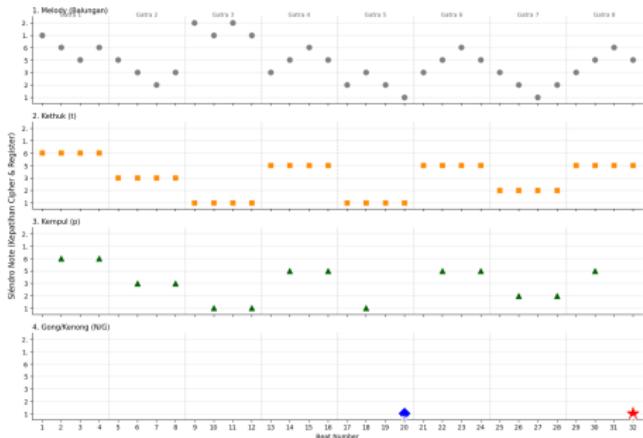


Figure: Plot Struktur

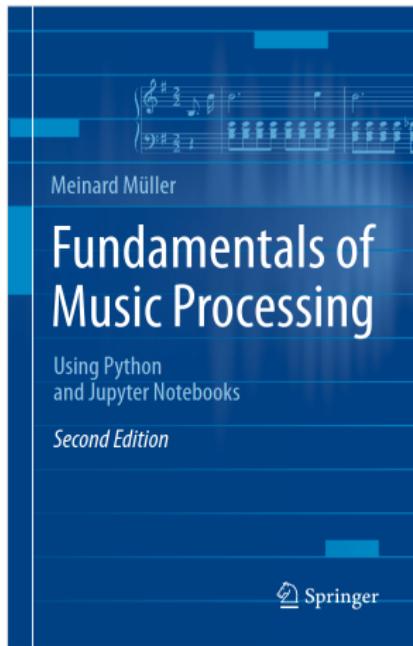


Figure: Buku Referensi

# Insight

## Chapter 4. Music Structure Analysis



Figure: 4.1. From the book

### The General Goal of Music Structural Analysis

- Temporal Segmentation
- Structural Identification
- Categorical Grouping

### The methods

- Repition-based
- Novelty-based
- Homogeneity-based

# Insight

## Chapter 4. Music Structure Analysis

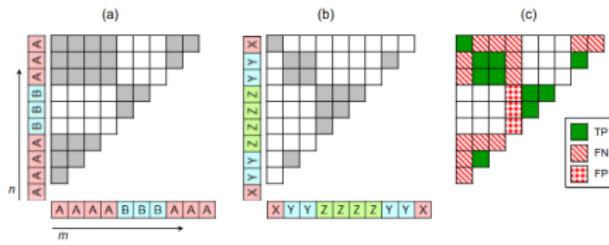


Figure: 4.30. From the book

## Evaluation

- Precision, Recall, F-Measure
- Structure Annotations
- Labeling Eval.
- Boundary Eval.
- Thumbnail Eval.

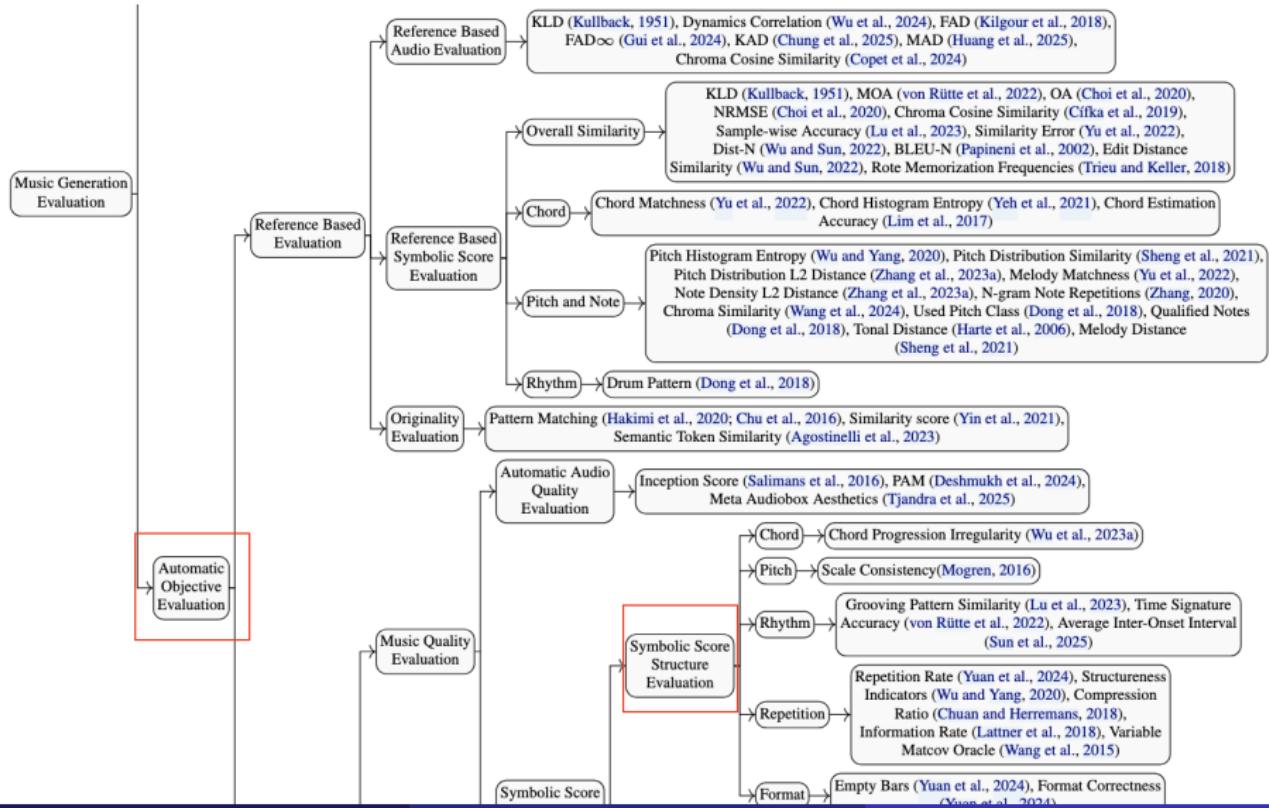
## Subjective evaluation are

- Unscalable
- Inability to Guide Improvement
- Missing the "Why"

de Berardinis, J., Cangelosi, A. and Coutinho, E. (2022) "Measuring the Structural Complexity of Music: From Structural Segmentations to the Automatic Evaluation of Models for Music Generation," IEEE/ACM Transactions on Audio, Speech, and Language Processing, 30, pp. 1963–1976. Available at: <https://doi.org/10.1109/TASLP.2022.3178203>.

# Insight

Kader FB, Karmaker S. A Survey on Evaluation Metrics for Music Generation [Internet]. arXiv; 2025 [cited 2025 Nov 19]. Available from: <http://arxiv.org/abs/2509.00051>



- Experimental evaluasi struktur pada dataset
- Experimental evaluasi struktur pada previous paper