A DATASET OF SYMBOLIC TEXTURE ANNOTATIONS IN MOZART PIANO SONATAS

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1164 bar-level annotations of texture

3 Mozart piano sonatas (9 movements)



Annotated following a texture-dedicated syntax [1]

Symbolic texture refers to the organization of notes, voices and layers in a musical score



A six-note dense layer with with melodic (horizontal), harmonic (vertical), static (regularity and emphasis, here) functions, decomposable in two sublayers. And silence.

Density: average number of notes heard simultaneously Diversity: number of separated textural layers

Tools for symbolic texture analysis

Computed on symbolic scores

62 high-level features of symbolic music

Extracted from manual annotations

14 binary textural elements 'MisTrue': "At least one layer is labelled as melodic" **Bar-level** information Implemented in *Python*



Use case: prediction of textural elements

62-sized vector of Binary classifier textural element (Logistic regression) symbolic features output

Evaluation: cross-validation on the 9 movements: average F1-score.

Textural element % of all annotated measures		Textural element	Log. Reg.	Random	All True	
Melodic function (M) 94.6			Melodic function (M)	0.912	0.665	0.973
Harmonic function (H) 62.1			Harmonic function (H)	0.744	0.545	0.799
Static function (S) 42.6			Static function (S)	0.616	0.457	0.599
Homorhythmy (h) 33.8			Homorhythmy (h)	0.673	0.396	0.453
Parallel motions (p) 24.5			Parallel motions (p)	0.572	0.315	0.401
Octave motions (o) 17.4			Octave motions (o)	0.538	0.211	0.244
h or p or o (h+) 61.4			h or p or o (h+)	0.810	0.538	0.708
p or o (p+) 35.5			p or o (p+)	0.602	0.393	0.479
Scale motives (s) 21.5			Scale motives (s)	0.363	0.282	0.332
Sustained notes (t) 12.6			Sustained notes (t)	0.669	0.161	0.193
Oscillations (b) 5.1			Oscillations (b)	0.098	0.116	0.103
Repeated notes (r) 12.5			Repeated notes (r)	0.501	0.183	0.200
Sparsity (_) 20.1			Sparsity (_)	0.587	0.258	0.306
Sequential (,) 16.6			Sequential (,)	0.520	0.198	0.291
5	0 %					
Dataset and code available at www.algomus.fr/data	Annotate dezra	d scores on ann.net	Applications and perspectives Texture-driven music generation Evolution of texture			

References.

[1] L Couturier, L Bigo, and F. Levé, "Annotating Symbolic Texture in Piano Music: a Formal Syntax", Sound and Music Computing Conference (SMC 2022), 2022. [2] J. Hentschel, M. Neuwirth and M. Rohrmeier, "The annotated Mozart Sonatas: Score, Harmony, and Cadence," Transactions of the International Society for Music Information Retrieval, vol. 4, no. 1, 2021.









