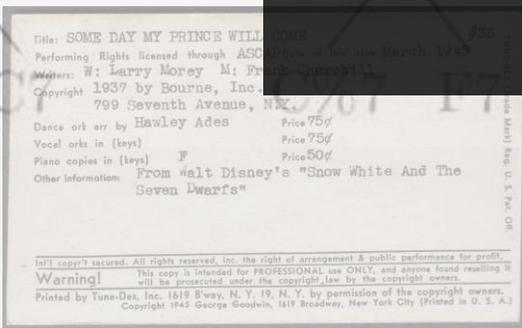


Analyse et essai de reconstruction de structures arborescentes des grilles de jazz

Patrice THIBAUD, Mathieu GIRAUD



Which of These Worries Are Yours?

CAN'T FAKE REQUESTS. (*Can't remember pick up or release*)

CAN'T PLAY REQUESTS. (*Not up on your tunes*)

CAN'T FIND PUBLISHERS OF TUNES YOU WANT.

DON'T KNOW IF TUNES ARE ASCAP, BMI, SESAC, etc.

MUST WADE THROUGH FILES OF MUSIC TO ARRANGE A PROGRAM.

MUST DRAG STACKS OF ORKS & PROS WHERE EVER YOU WORK.

WISH YOU COULD GET ADVANCE INFO ON NEW TUNES.

These Problems Are Simply, Quickly and Completely Solved by

TUNE-DEX

(The Trade Encyclic Music Reference Index)

If you can show proof of your professional activity in the entertainment field, you can subscribe to this helpful service, at the cost of only a few cents a day. Tune-Dex cards, only 3"x5", detail complete information about each tune—publisher, address, orchestrator, keys, prices, copyright info, etc., and a chorded lead sheet of the chorus.

FREE—*Samples of Tune-Dex cards and information.*

Write NOW to

TUNE-DEX, INC. Dept. D-10, 1619 Broadway, New York City

SOME DAY MY PRINCE WILL COME

Valse moderato

Musical score for 'Some Day My Prince Will Come' in G major, 3/4 time. The score consists of six staves of music with lyrics underneath. Chord symbols are written above the notes. The lyrics are: 'SOME DAY MY PRINCE WILL COME, Some day I'll find my love, And how thrill-ing that mo- ment will be, When the Prince of my dreams comes to me. He'll whis- per "I love you," And steal a kiss or two, Though he's far a- way, I'll find my love some day, Some day when my dreams come true.'

Copyright 1937 by Bourne, Inc., N.Y.

Title: SOME DAY MY PRINCE WILL COME #35

Performing Rights licensed through ASCAP Date of this issue March 1945

Writers: W: Larry Morey M: Frank Churchill

Copyright 1937 by Bourne, Inc.

799 Seventh Avenue, N.Y.

Dance ork arr by Hawley Ades Price 75¢

Vocal orks in (keys) Price 75¢

Piano copies in (keys) F Price 50¢

Other information: From Walt Disney's "Snow White And The Seven Dwarfs"

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TUNEDEX (Trade Mark) Reg. U. S. Pat. Off.

Grilles et structures arborescentes

Corpus

- des *Tune-dex* aux *Real Books*
- ... aux forums spécialisés
- *Shanahan et Broze (2013)*
- 1160 morceaux / 50 ans

```
!!!OTL: Birk's Works  
!!!COM: Gillespie, Dizzy  
!!!ODT: 1956  
**jazz  
*M4/4  
*f:  
1F:min6  
=  
2Gh7  
2C7b9  
=  
1F:min6
```

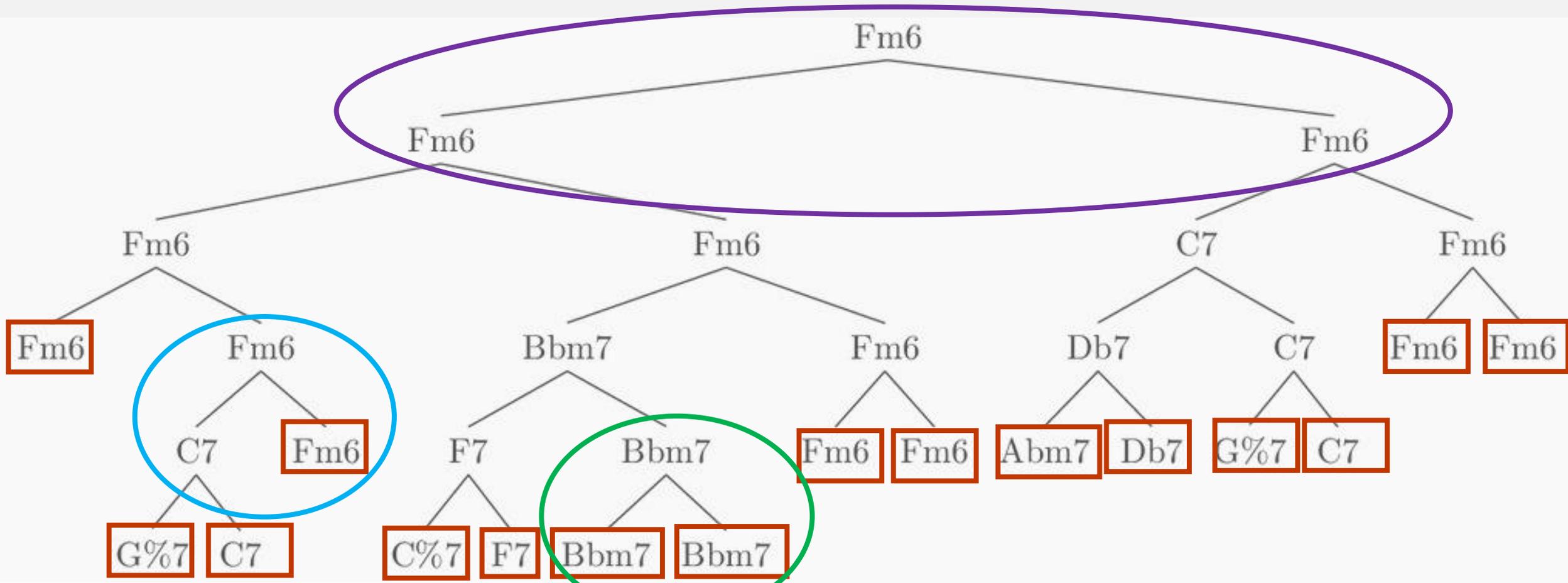


Birk's Works
(Up Tempo Swing)

Birk's Works		Dizzy Gillespie	
$\frac{4}{4}$ F_{m6}	$G_{\emptyset 7}$ C_{7b9} F_{m6}	$C_{\emptyset 7}$ F_{7b9}	
B_{m7}^b	∕	F_{m6}	∕
A_{m7}^b D_7^b	$G_{\emptyset 7}$ C_{7b9} F_{m6}	∕	

**BIRKS
WORKS
BIRKS
WORKS**

**The
Verve
Big-Band
Sessions**

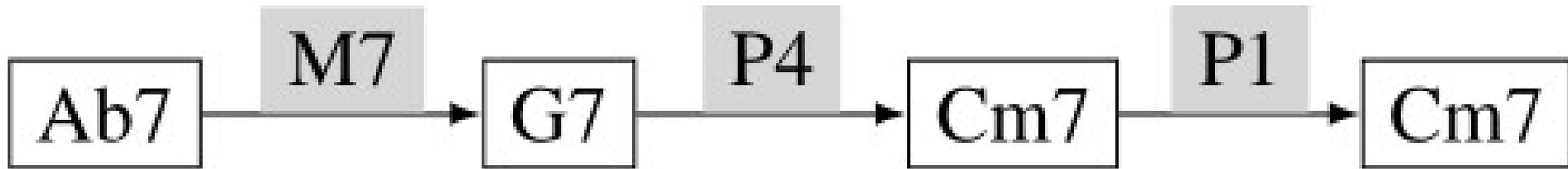


$\frac{4}{4} F_{m6}$ | $G_{\emptyset 7} C_{7b9} F_{m6}$ | $C_{\emptyset 7} F_{7b9} B_{m7}^b$ | $\% F_{m6}$ | $\% A_{m7}^b D_7^b$ | $G_{\emptyset 7} C_{7b9} F_{m6}$ | $\%$

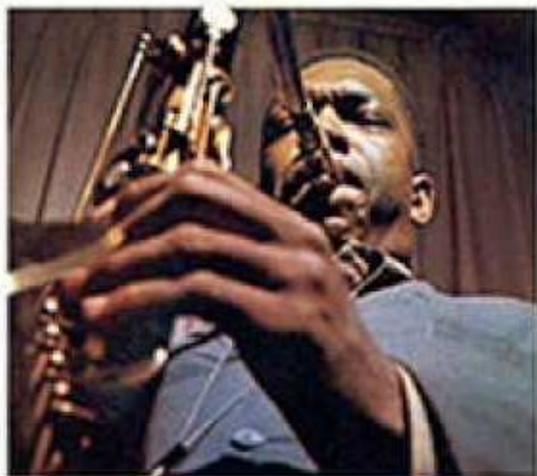
JHT : Jazz Harmony Treebank

- *Harasim, Rohrmeier et al. (ISMIR 2020)*
- 150 grilles arborescentes
- analyse humaine
- Format JSON

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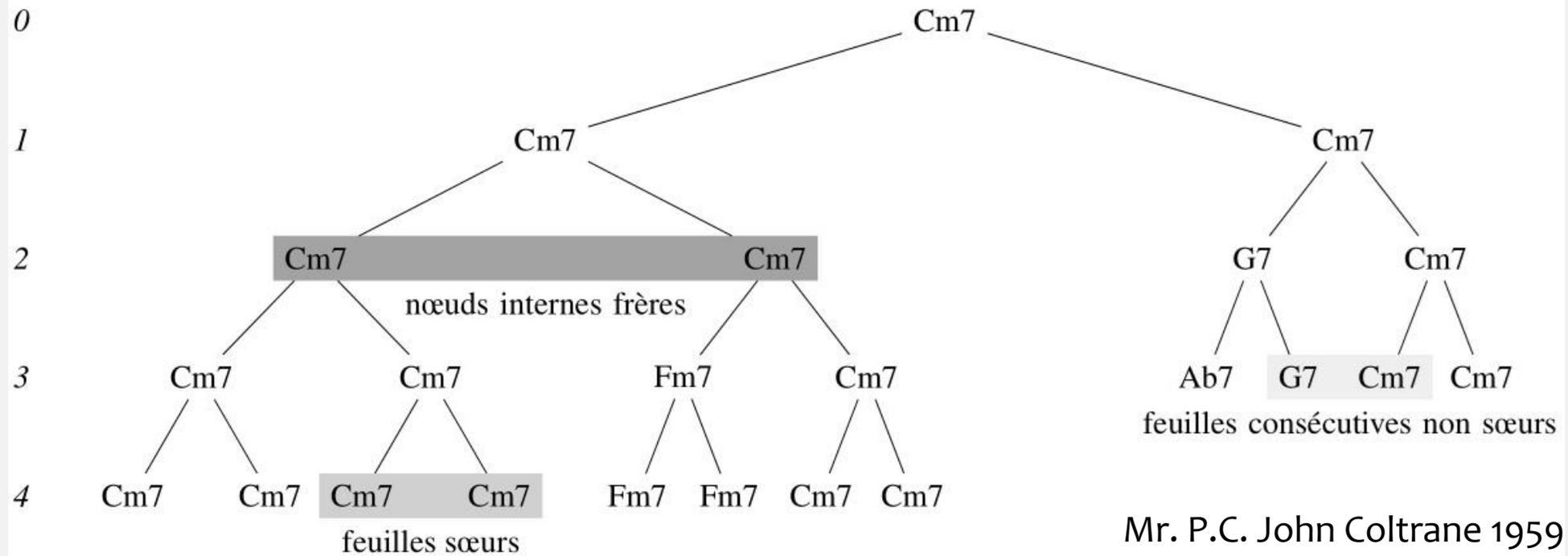


JOHN COLTRANE GIANT STEPS



Progressions d'accords et arbres

Mouvements harmoniques



- *Feuilles de l'arbre et grille*

- P1 consécutifs fréquents
- Cycle de quintes

- *Nœuds internes et structure à plus haut niveau*

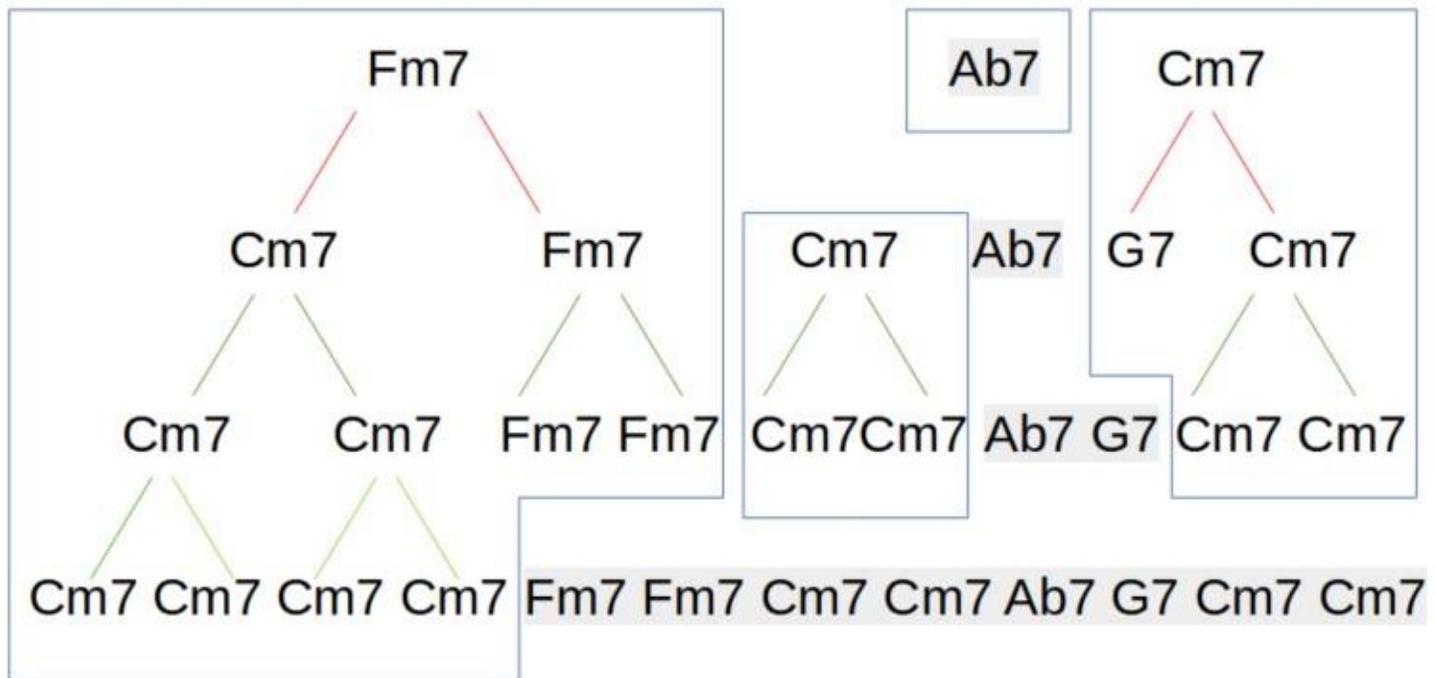
- Prolongations fortes des P1
- Tonique : racine de l'arbre

intervalles	P1	P4	M7
feuilles consécutives	24.0	44.0	5.8
feuilles sœurs	43.5	43.0	5.6
nœuds internes frères	33.5	46.5	6.0
profondeur 1	90.0	4.7	–
profondeur 2	49.6	37.6	1.8
profondeur 3	43.1	33.4	6.2
profondeur ≥ 4	27.5	51.7	6.7

.....

P4

P1*



- Entrées : grille / scénario
- Sortie : arbre complet ou sous-arbres

- scénario 1 : P1*, P4, P1*
- scénario 2 : P1*, P4, P1*, P4, P1*, [P5, M2, M6], P1*
- scénario 3 : P1*, P4, M7, P1*, P4, [P5, M2, M6], P1*, P4, P1*
- scénario 4 : P1*, P4, M7, P1*, P4, [P5, M2, M6], OTHERS, P1*, P4, P1*

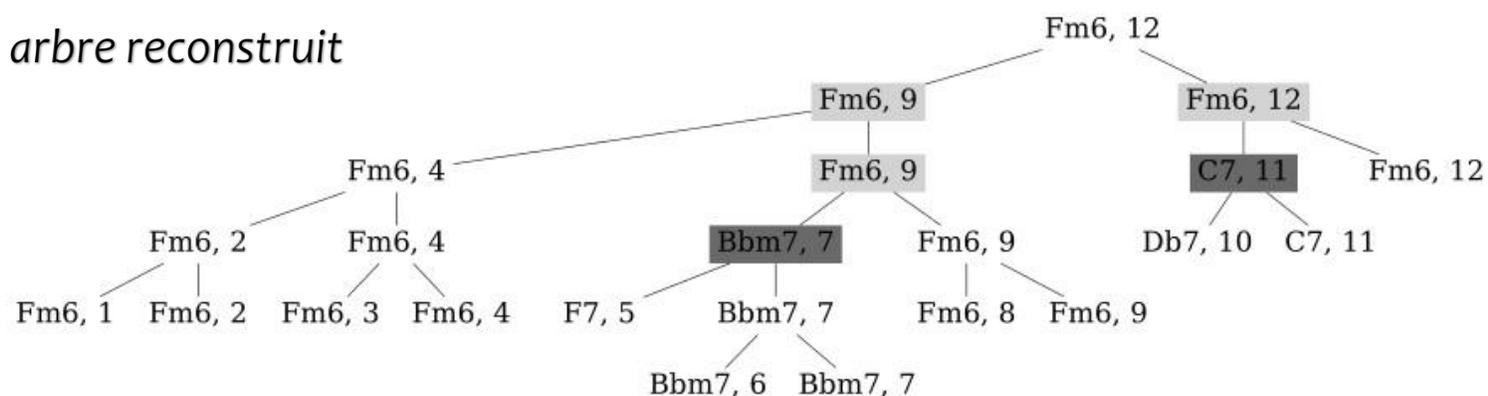
Vers une reconstruction ...

Evaluation

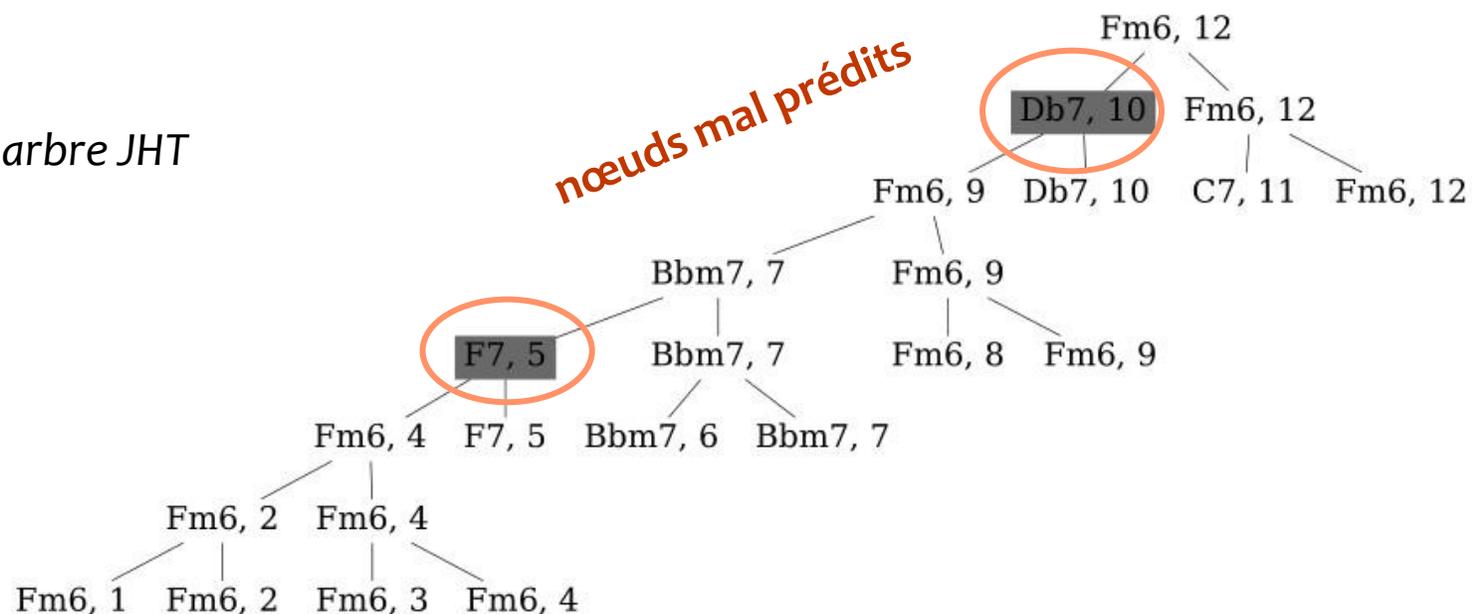
- Comparaison avec JHT
- Remontée des positions des feuilles
- Nœuds bien/mal prédits

scénario	precision moyenne	sensitivité moyenne
1	0.78	0.56
2	0.72	0.60
3	0.72	0.64
4	0.69	0.68

arbre reconstruit



arbre JHT



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Perspectives

Fm6, 4

Fm6, 9

Fm6, 12

Fm6, 9

Fm6, 9

Db7

Fm6, 8

Fm6, 9

Bbm7, 6

Bbm7, 7