

# Mazurka paper figures

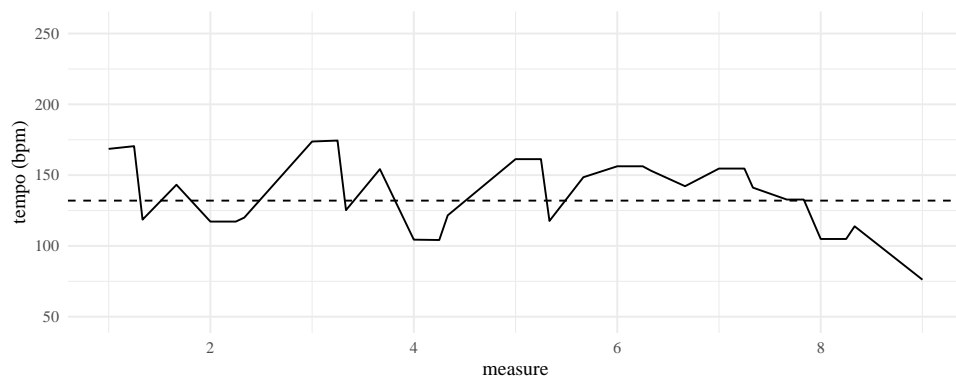
*DJM*

*2/22/2019*

## Suggested order

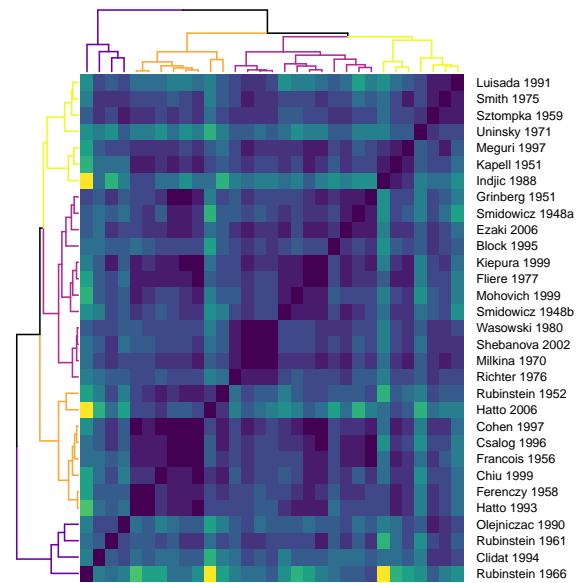
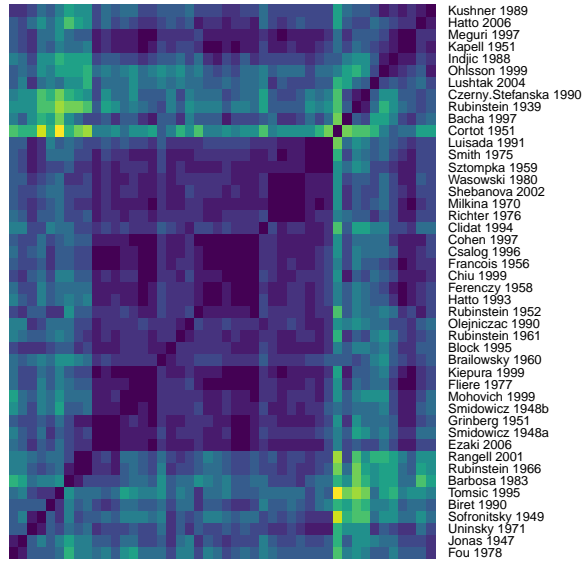
1. Parameter interpretation in Fliere
2. Using parameters to examine two different performances
3. Clustering performances (compare the clusters)
  - a. what can we say about the parameters of each cluster? what is different about them?
4. Similar performances (Rubinstein)
5. Model issues

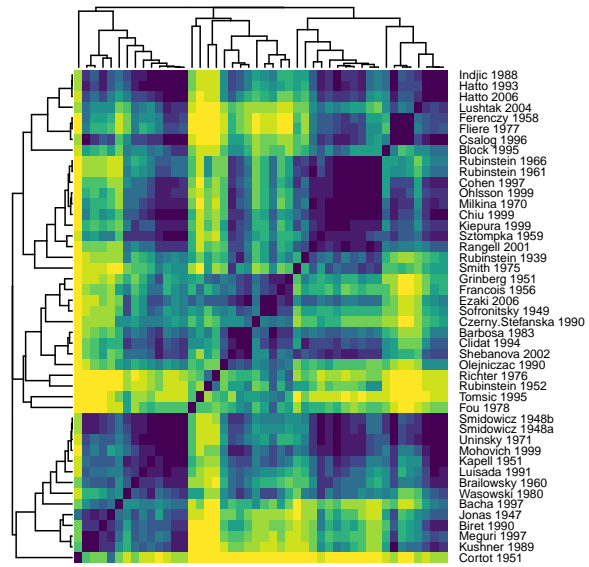
## Short tempo



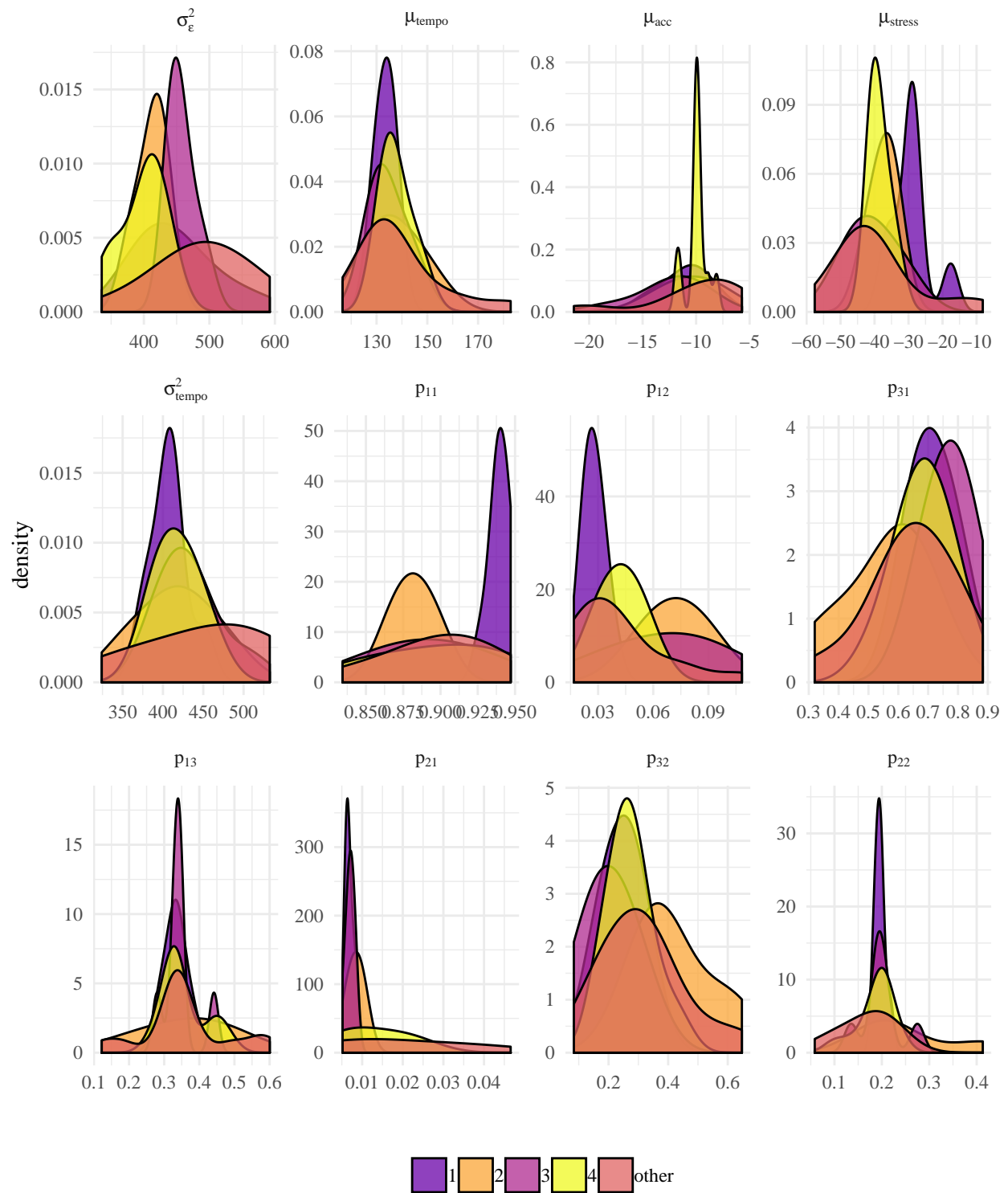
## Comparing clusters

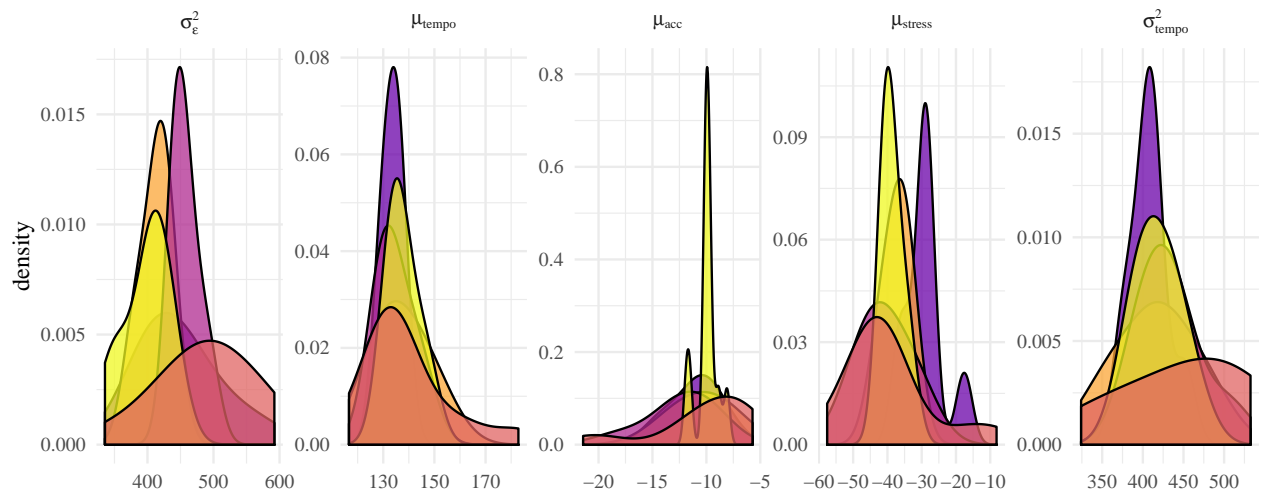
```
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] FALSE
## [1] TRUE
## [1] TRUE
## [1] TRUE
## [1] 8
```



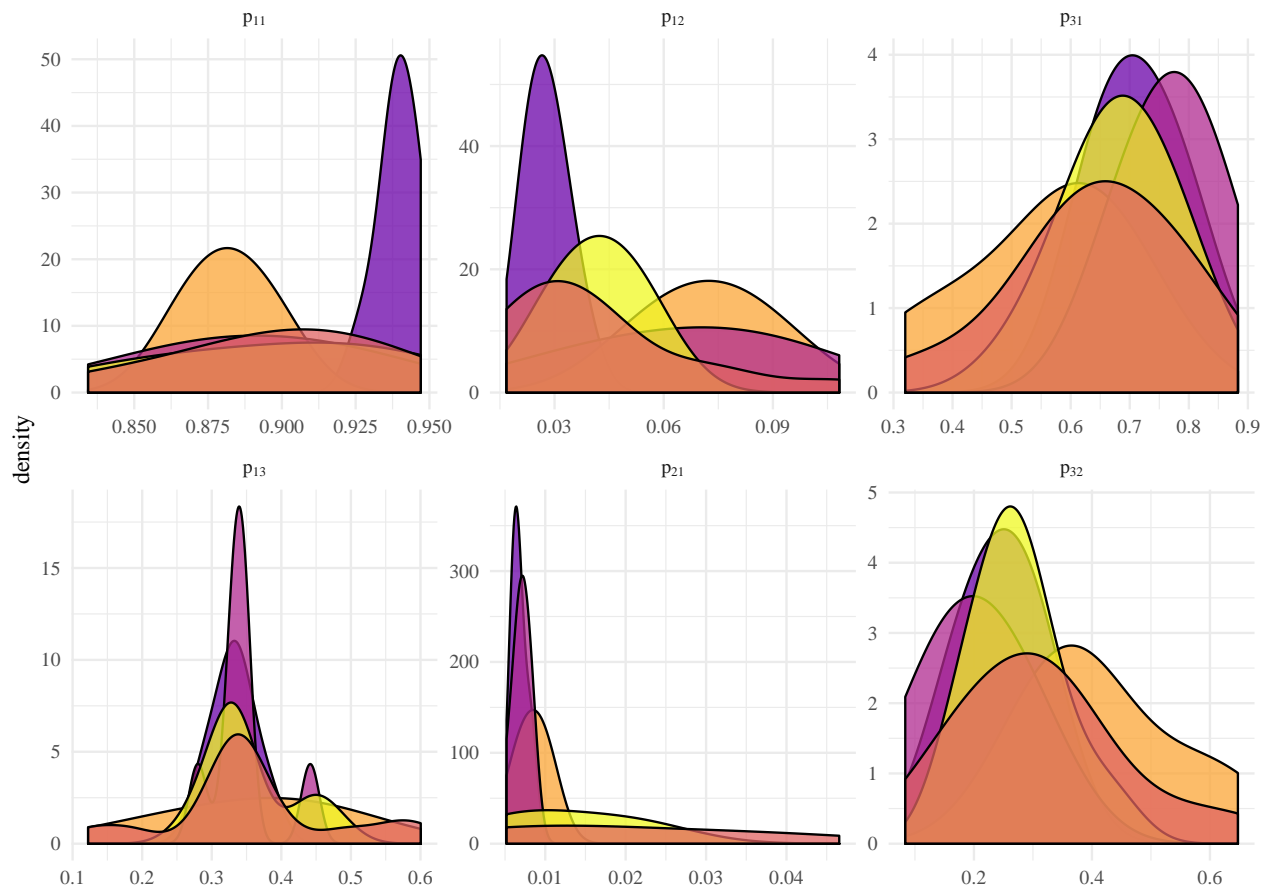


# Cluster densities



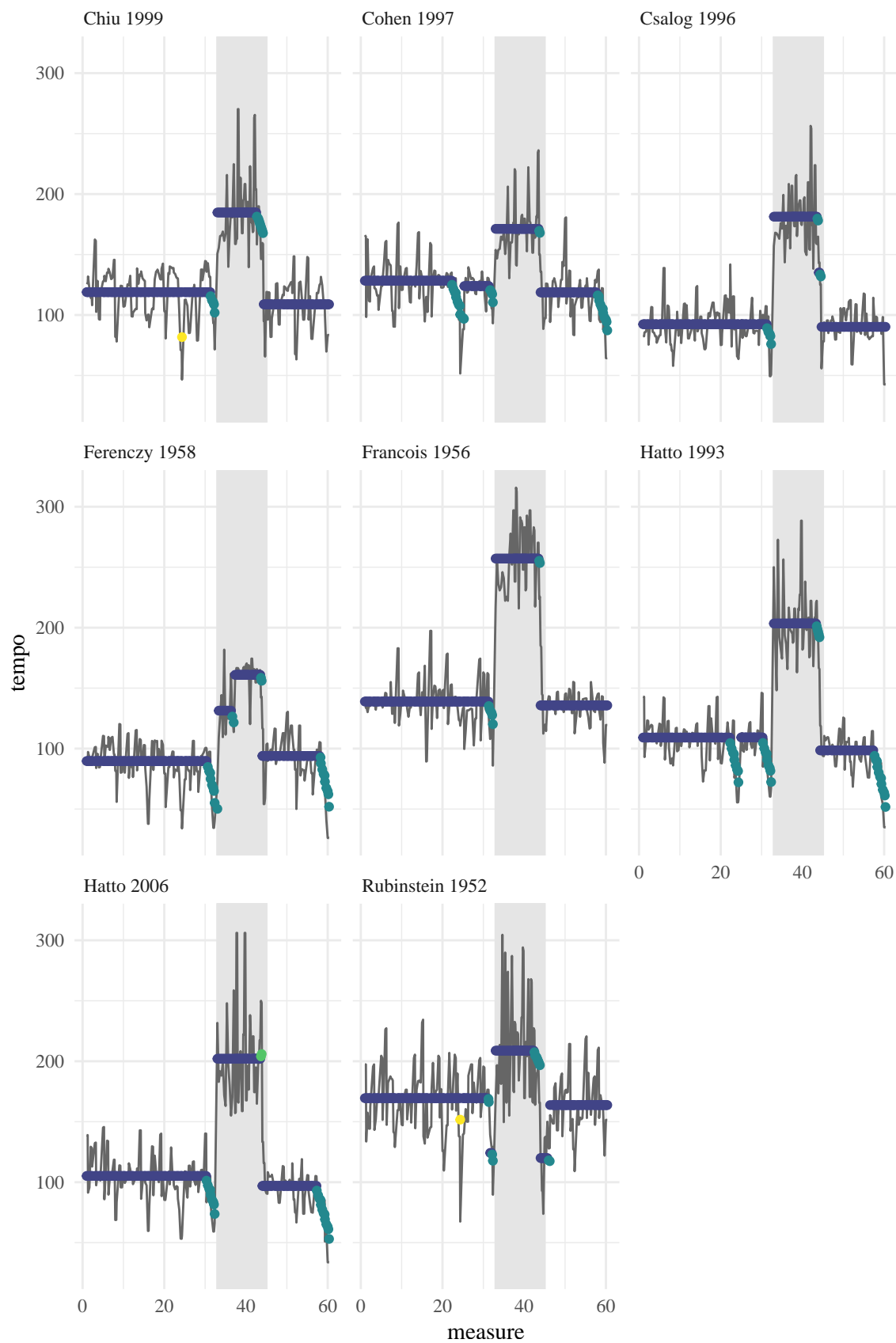


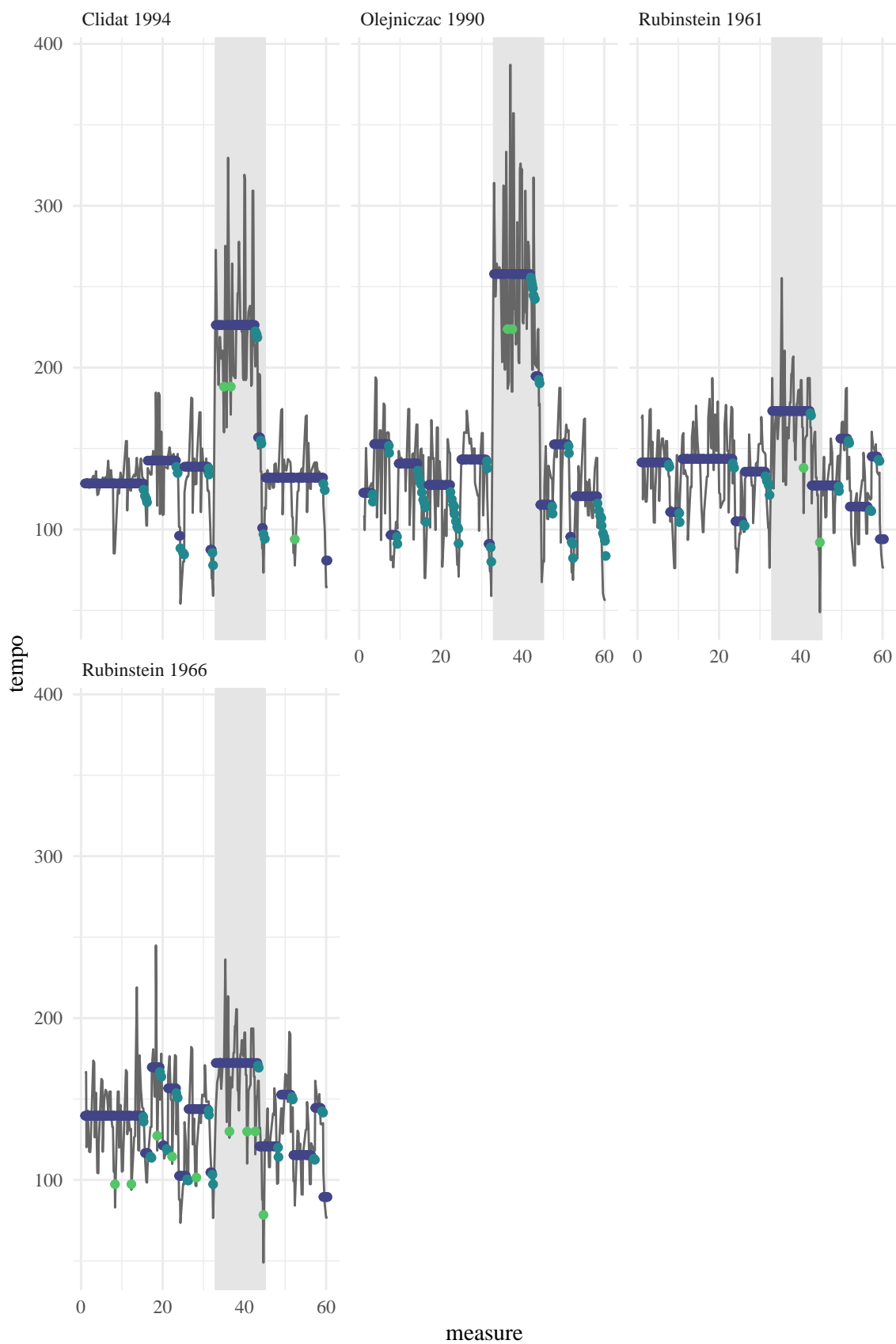
1 2 3 4 other

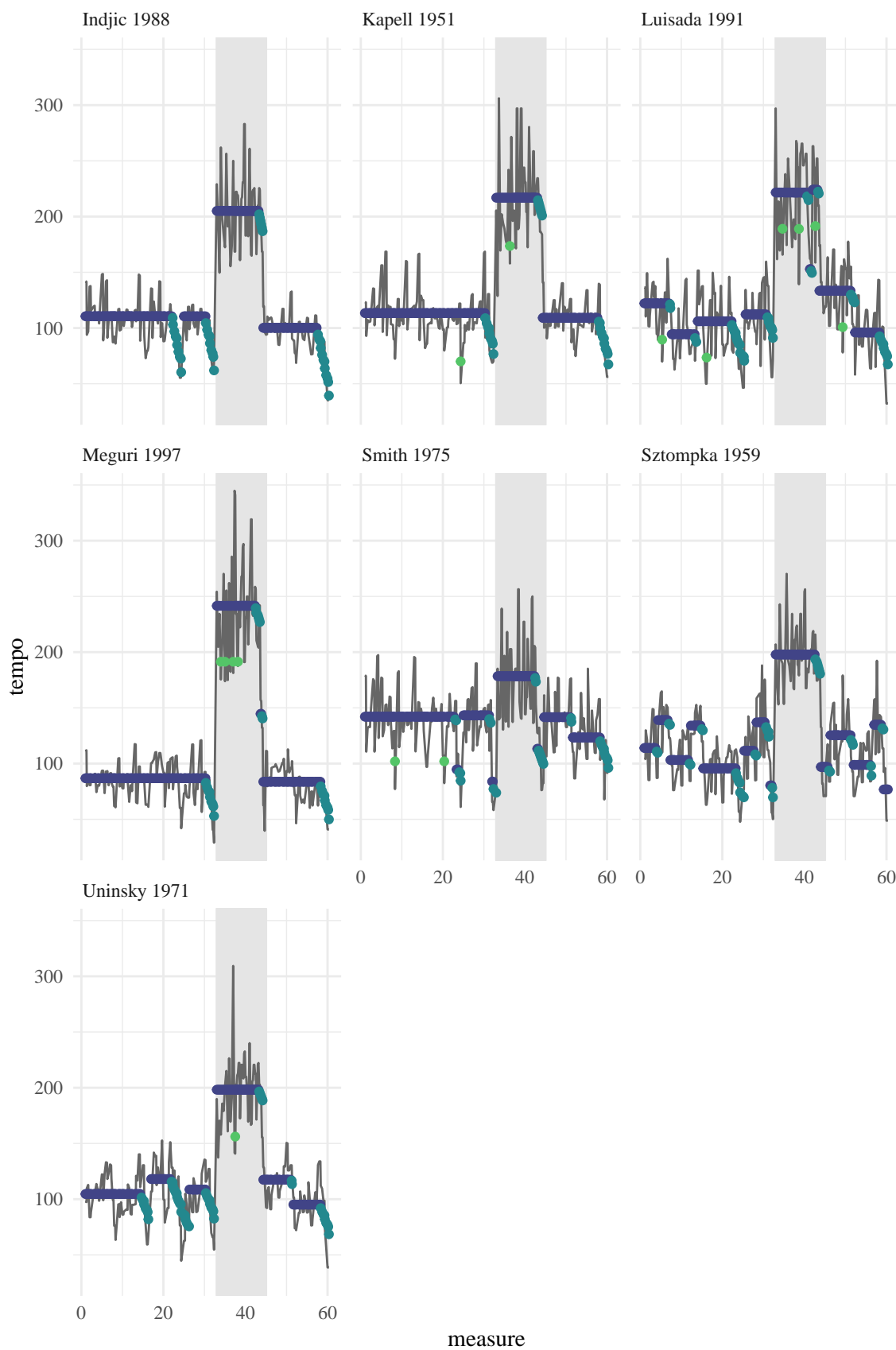


1 2 3 4 other

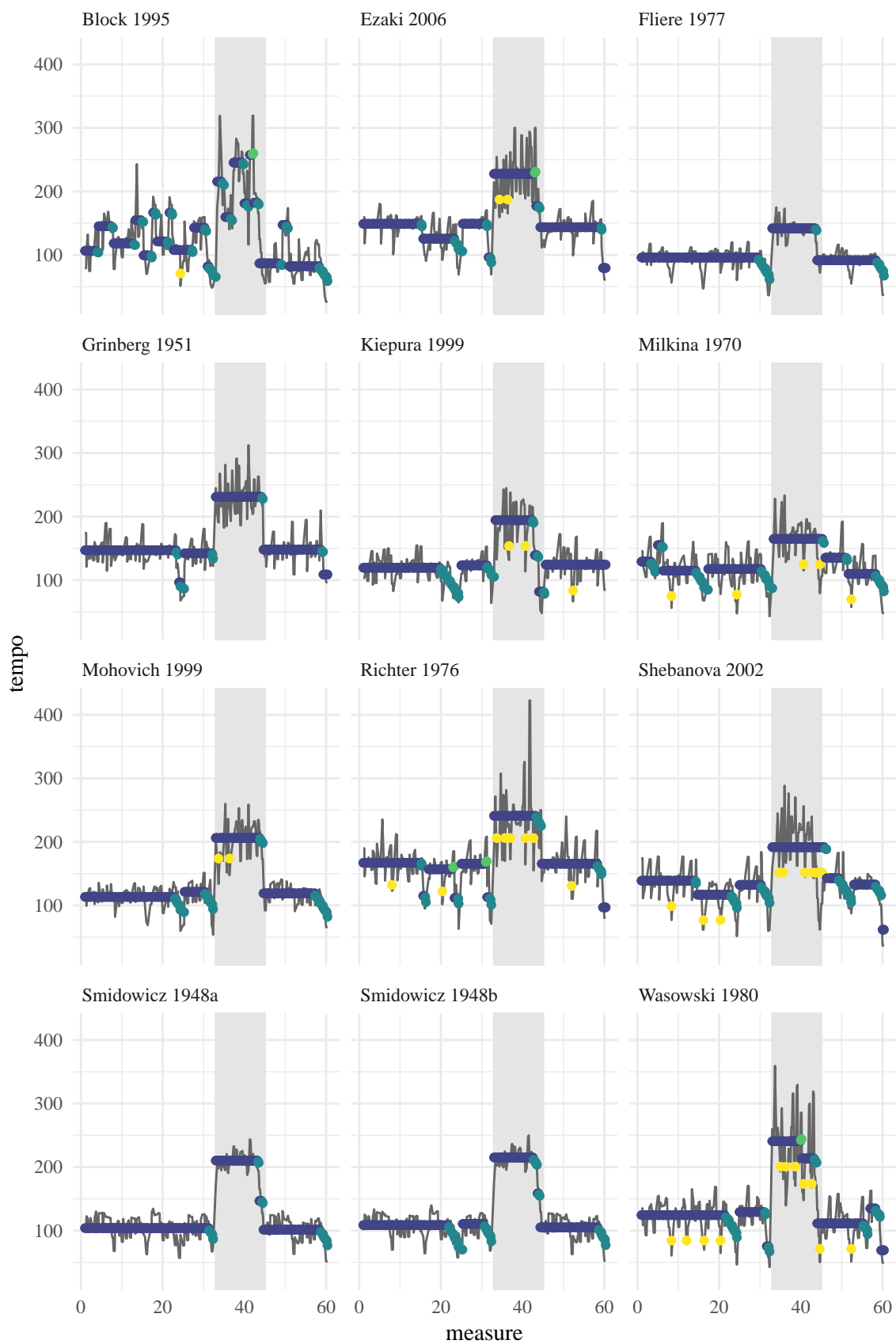
## Plotting performances

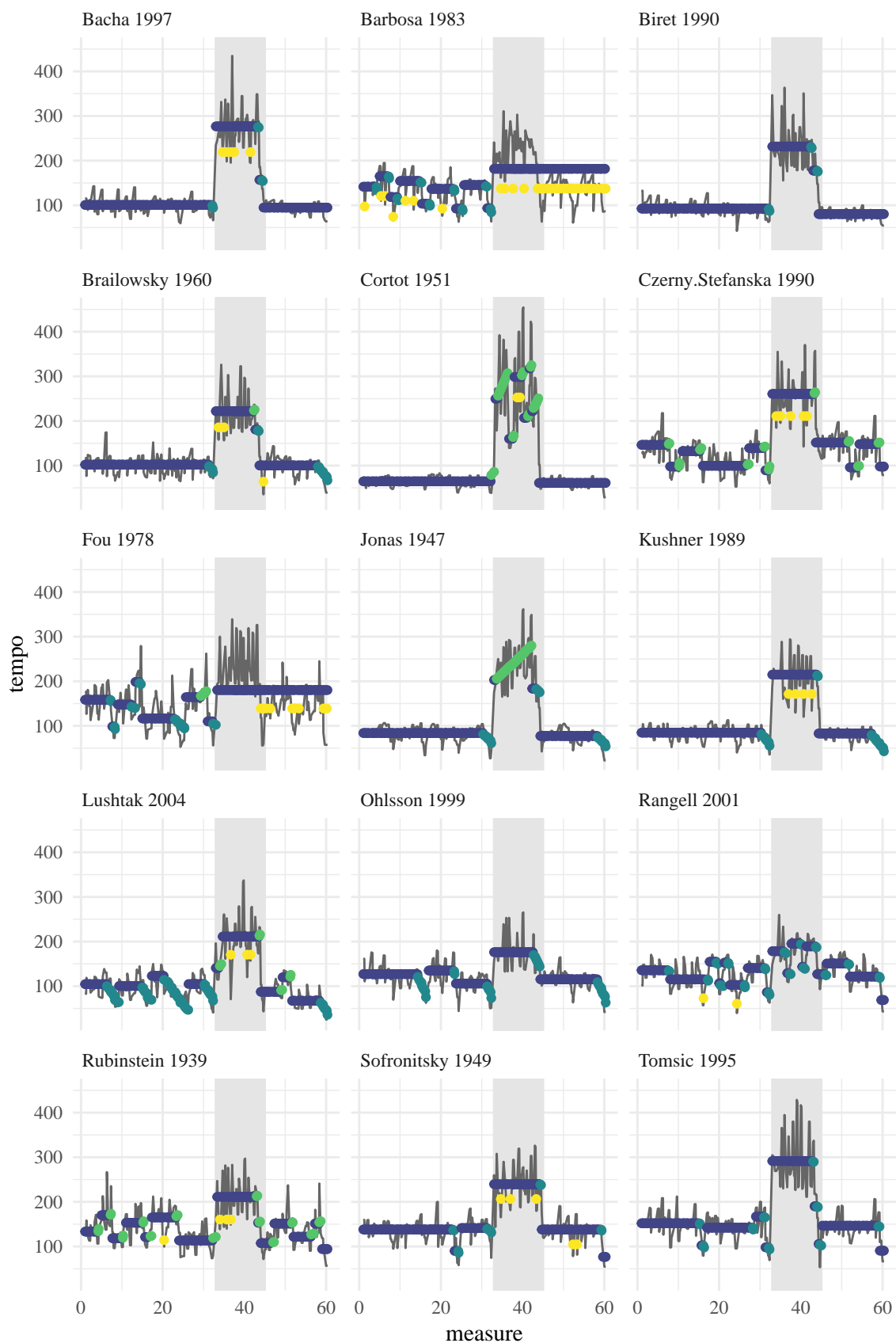


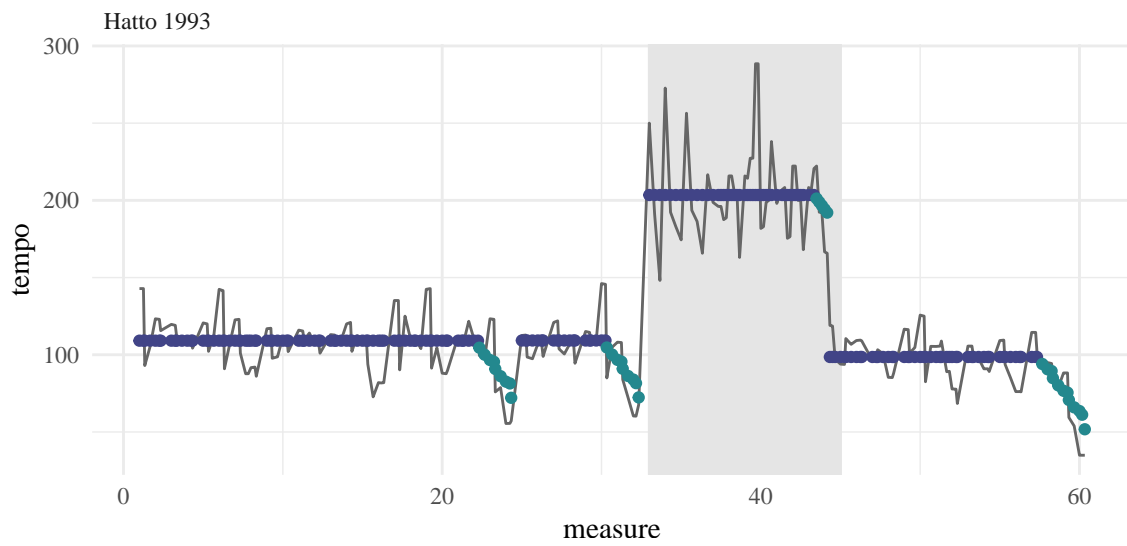
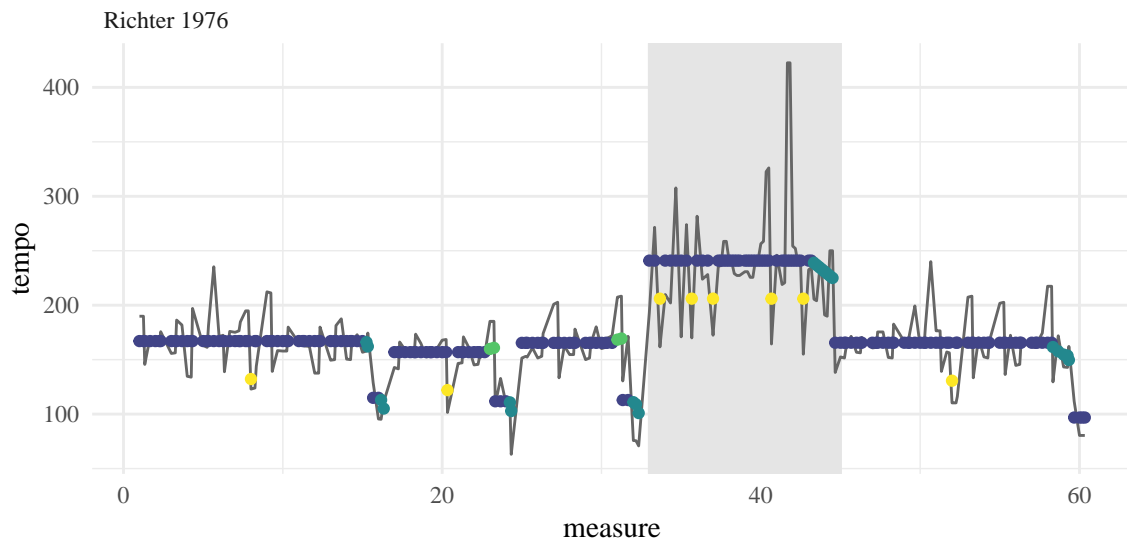


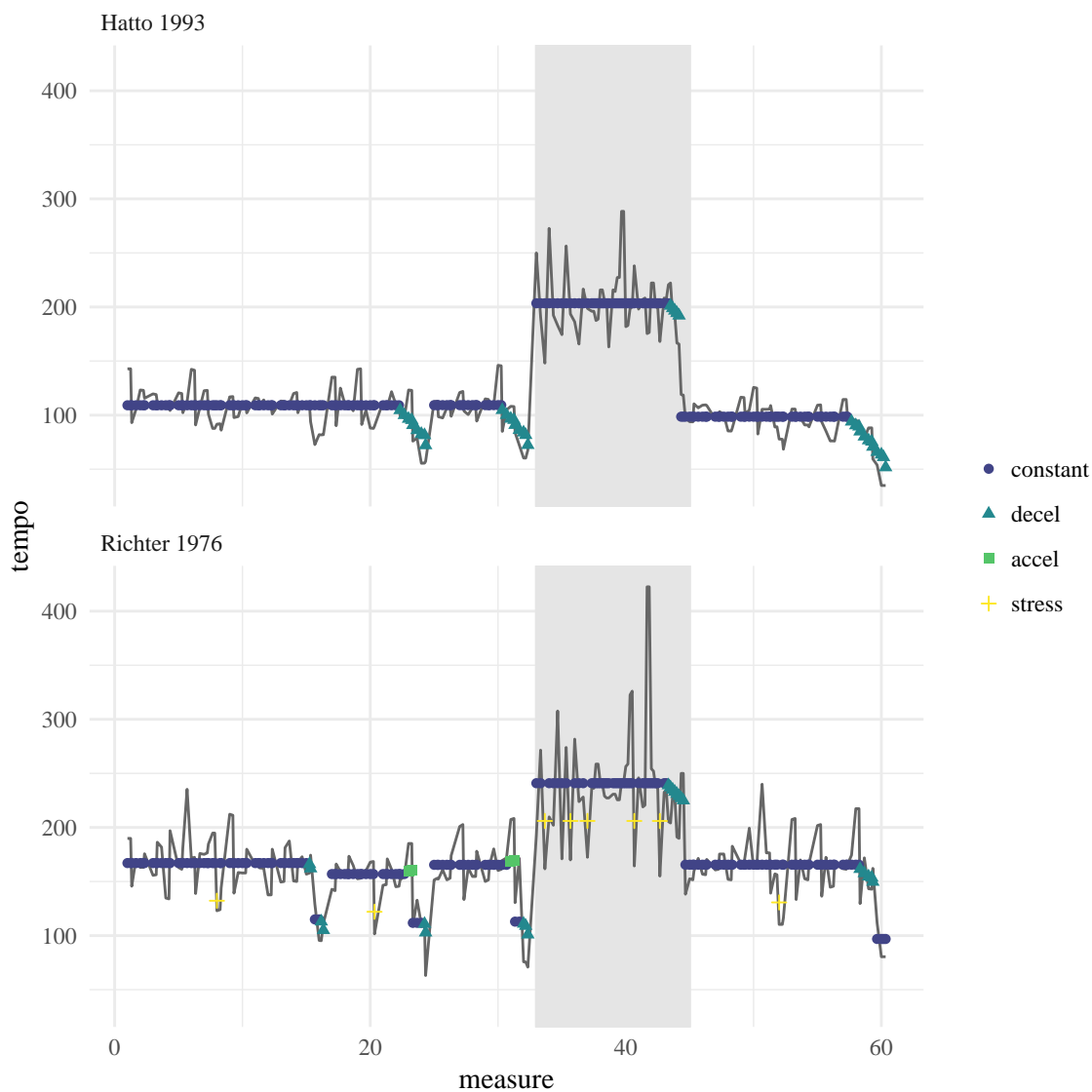








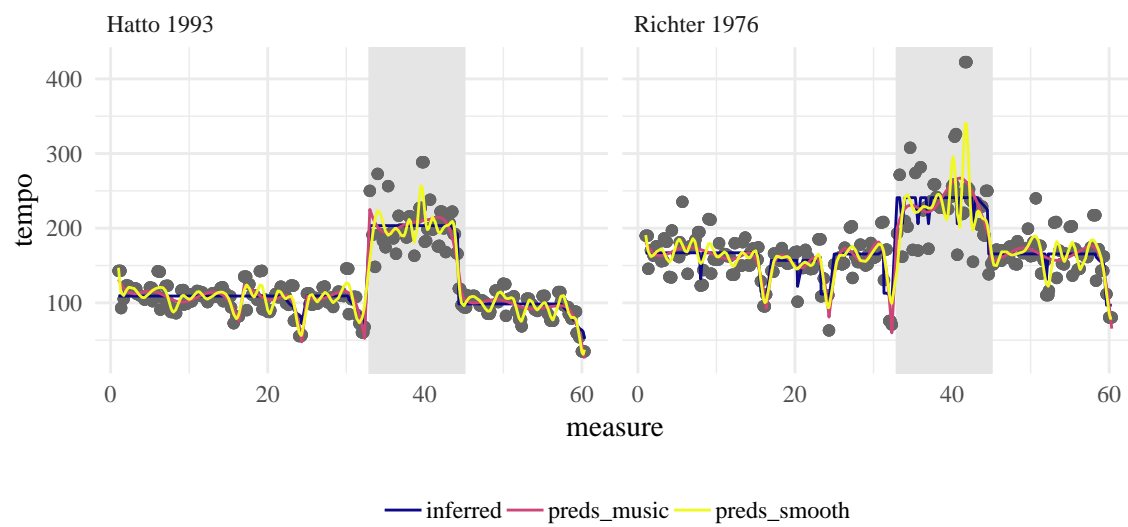




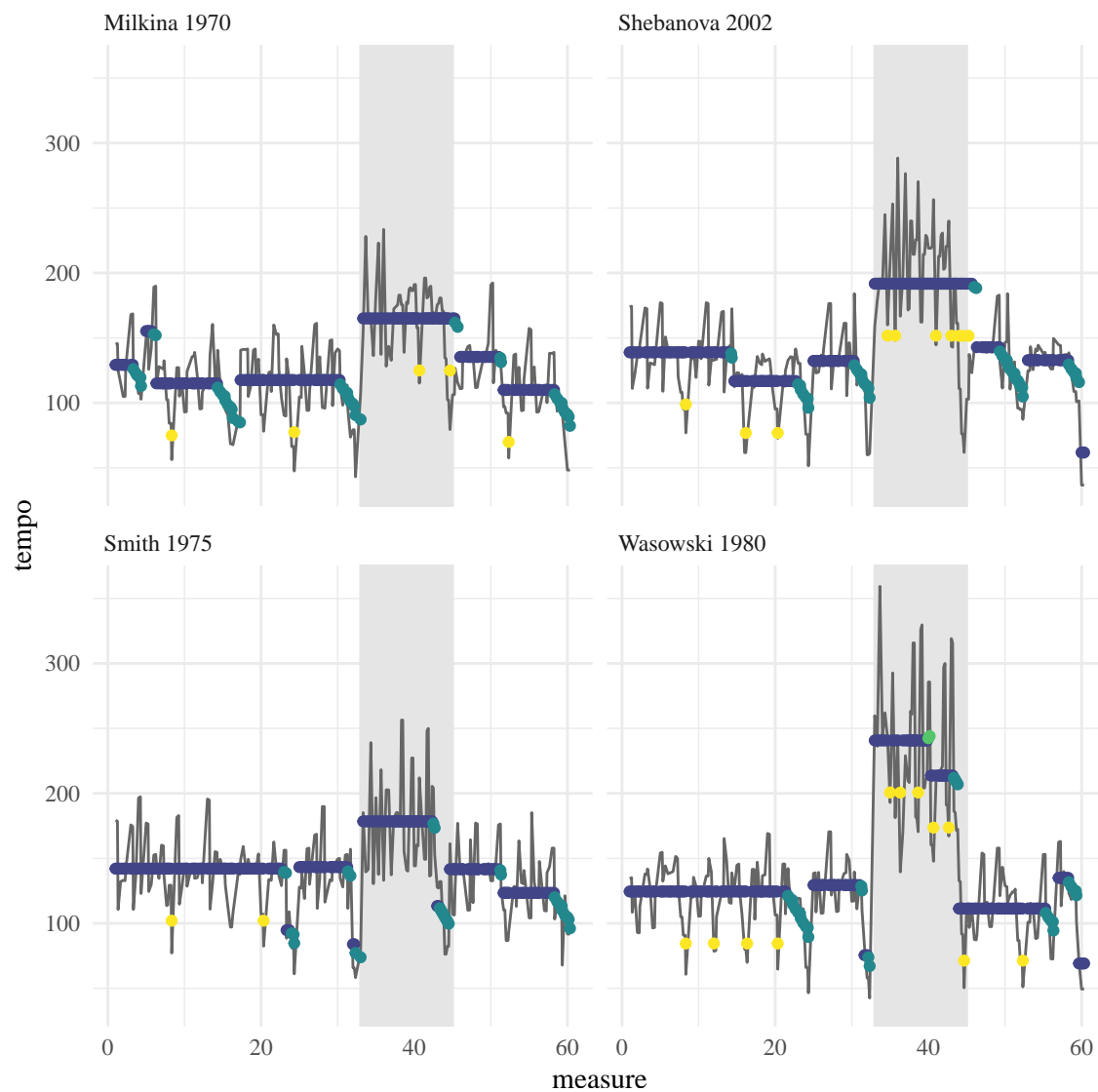
	sig2eps	mu1	mu2	mu3	sig2tempo	p11	p12	p22	p31	p13	p21	p32
Richter 1976	426.70	136.33	-11.84	-34.82	439.38	0.85	0.05	0.74	0.44	0.02	0.25	0.17
Hatto 1993	405.57	130.36	-13.57	-27.93	408.99	0.94	0.03	0.82	0.36	0.01	0.16	0.19

## Different smoothing

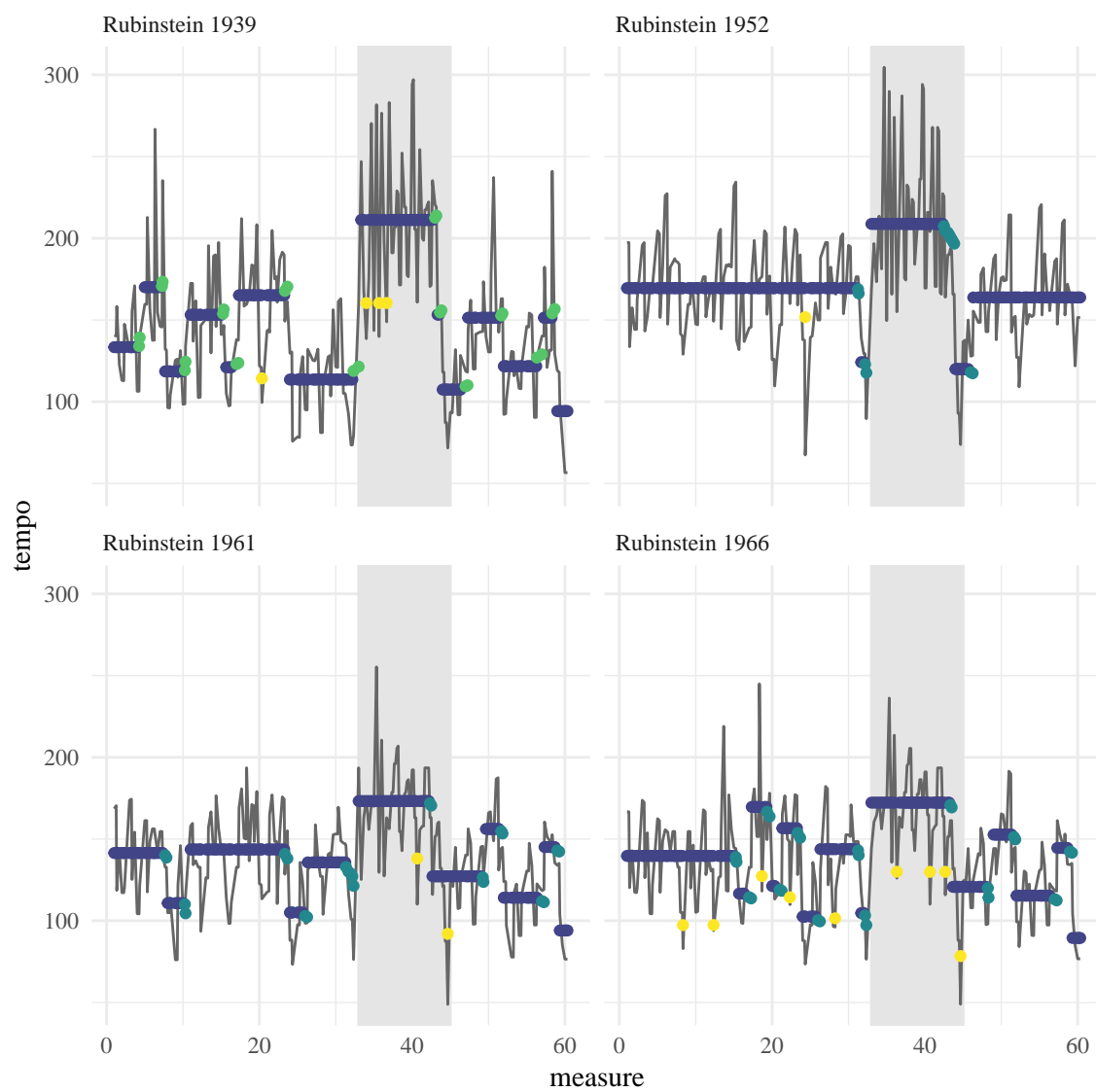
Try splines, replicating knots, l1tf?



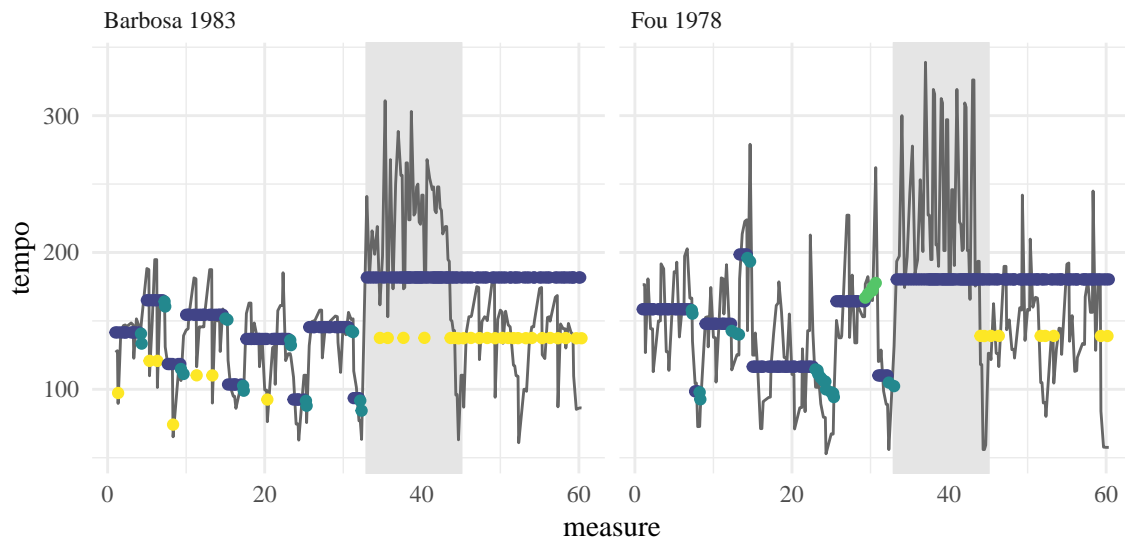
## Similar performances



## Rubinstein contrast



## Bad estimation



## Problems with the model

- Problem with retransitioning to state 1
- states 2 and 3 aren't constrained to always decrease/increase, only in mean
- state 4 may not always emphasize a slow down
- previous 2 have to do with Gaussian assumptions
- necessity for strong priors
- but priors are on parameters, not on path (how would we want this to change?)