QuaDramA

Plotting Poetry (and Poetics) 3

26-27 September 2019, ATILF, Nancy

Identifying Character Types in German Drama

As a Classification Task

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'Rollenfach': an Actor's Type of Role

Bernhard Diebold's definition:

- A **'Rollenfach'** consists of a totality of roles that are similar in some respects/regards

- The similarity can be literary: based on the kinship of its underlying character types that were created by the poet

- In many cases, the literary types coincide with the actor's type of role

    (cf. Bernhard Diebold: *Das Rollenfach im deutschen Theaterbetrieb des* 18.*Jahrhunderts.* Leipzig 1913,

    pp. 9f. and Harris, Edward P.: Lessing und das Rollenfachsystem. Überlegungen zur praktischen Charakterologie im 18.

    Jahrhundert. In: *Schauspieltkunst im 18. Jahrhundert*. Wolfgang Bender (eds.), Stuttgart 1992, p. 222.)

'Rollenfach': an Actor's Type of Role

Brandes' 'Rollenfächer'	Actor	Lessings *Minna von Barnhelm*
1. tender father	Meyer	-
2. comical old man	Beil	Wirt
3. reasoner	Herter	Bruchsal
4. first lover (m)	Böck	Tellheim
5. second lover (m)	Zuccarini, Beck	Paul Werner
6. savant	Beck, Beil	Riccaut
7. first servant	Backhaus	
8. second servant	Beil	
9. character role (scheemer, ...)	Böck, Brandes, Iffland	Just
10. tender mother	Seyler, Pöschel	Dame in Trauer
11. comical mother	Wallenstein, Pöschel	
12. first lover (w)	Seyler, Brandes	Minna
13. second lover (w)	Toscani	
14. third lover (w) and naive roles	Toscani	
15. and 16. first and second soubrette	Kummerfeld, Pöschel	Franziska

'Rollenfach': an Actor's Type of Role

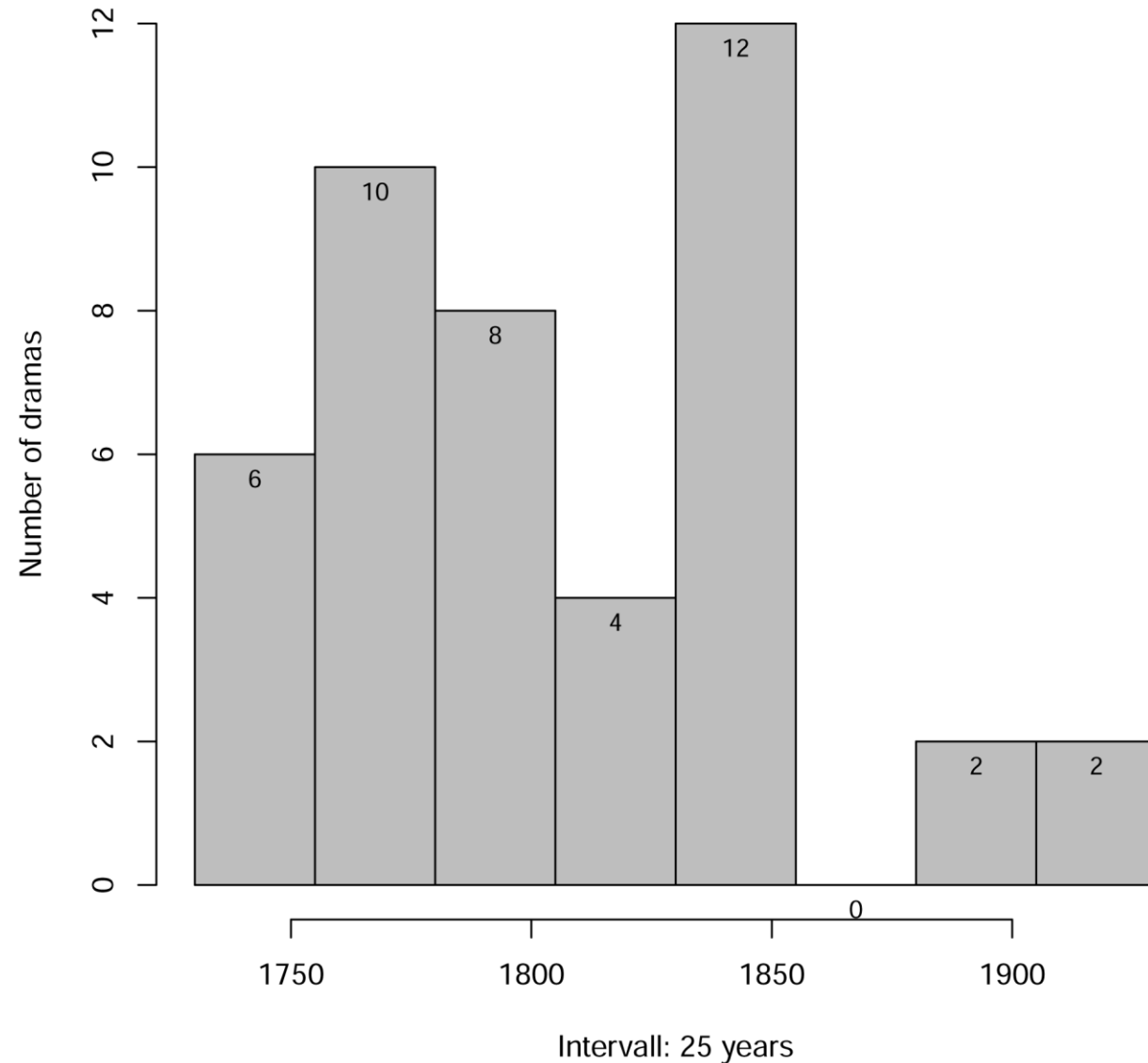| Brandes' 'Rollenfächer'	Actor	Lessings *Minna von Barnhelm*
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Distant Reading as Second Hand Criticism

Moretti's early *Distant Reading concept:*

"But in that case, literary history will quickly become very different from what it is

now: it will become 'second hand': a patchwork of other people's research,

without a single direct textual reading."

(Franco Moretti: "Conjectures on World Literature". In: New Left Review 1 (2000), p. 54.)

Corpus: 46 (44) German Dramas (1730-1920)

Annotating Character Types (Elisabeth in Schillers *Maria Stuart*)

dramatis personae	Fischer-Lichte	Kindlers Literaturlexikon	Mann	Kurz	Hillebrand	Schiller Handbook
queen of England	queen, competitor, woman, protestant, virgin, ruler, regent, renunciation of instincts, ethics of performance, exemplary, envious, power-hungry, addicted to ruling	queen, arrogant, rival	not beautiful, queen, jealous, tormentor	woman, queen, character based on hypocrisy and pretense, vanity	queen, enemy, protestant	queen, miserable, criminal, driven by power addiction and will to power

Category	Character Type	Category (II)	Character Type (II)
relationship	married woman / unmarried woman	social status	low social status f / low social status m
relationship	married man / umarried man	social status	aristocrat m / aristocrat f
relationship	widow	social status	monarch m / monarch f
family relations	(tender) father	social status	cleric m / cleric f
family relations	mother	social status	citizen m / citizen f
family relations	daughter	qualities	old man / old woman
family relations	son	action/conviction	schemer m / schemer f
family relations	brother	action/conviction	republican
family relations	sister	action/conviction	tyrant m / tyrant f
other relations	beloved f / beloved m	action/conviction	strategist
other relations	lover m / lover f	action/conviction	messenger
other relations	confidant f / confidant m (Vertraute)	action/conviction	opponent
social status	servant f / servant m		

Frequency of Types

Characters	204 (264)

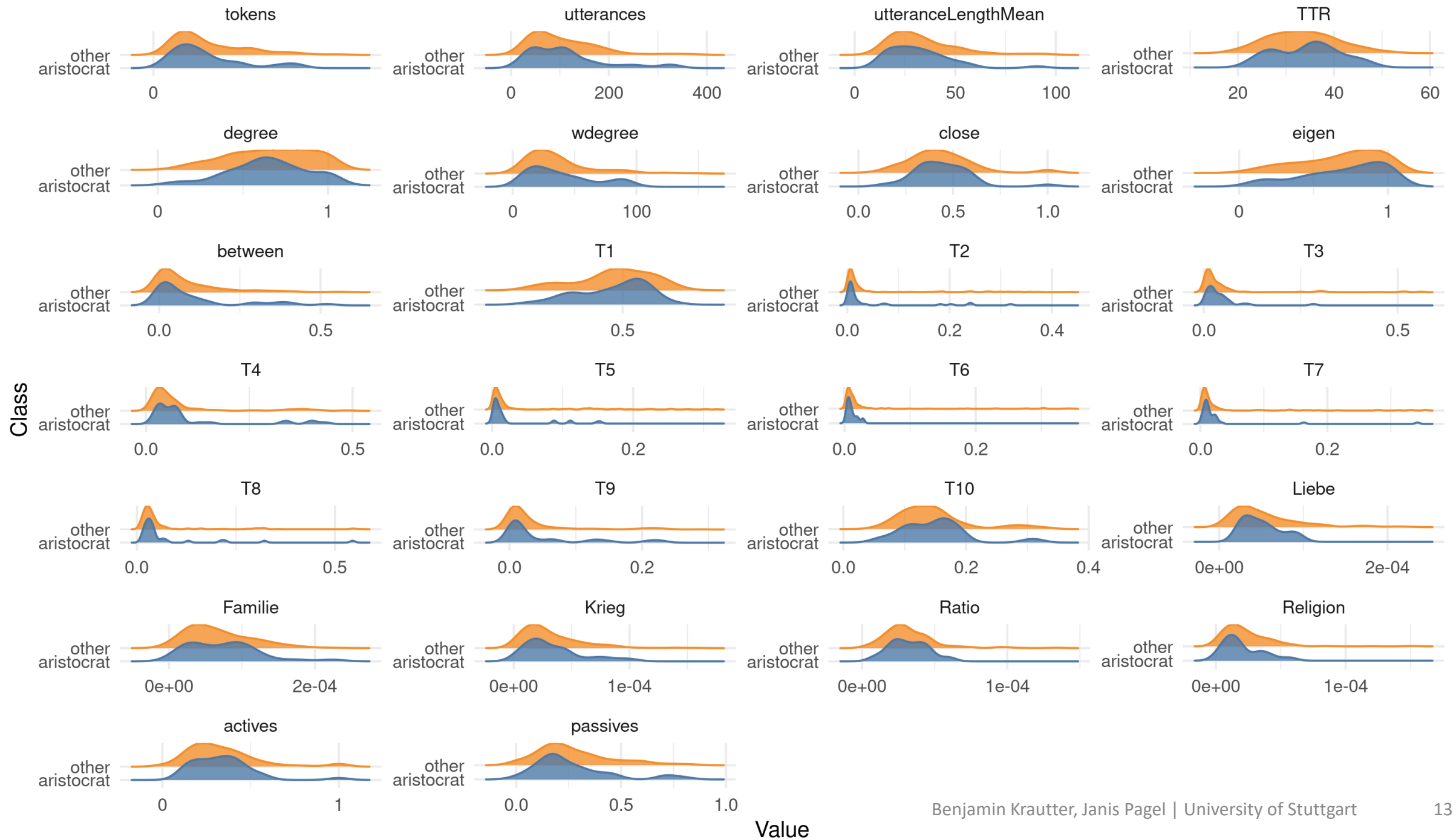| Type	Occurrences
Aristocrat	34
Servant	29
Daughter	23
Citizen	19
Married Person	19
Schemer	19

Classification

- Classify each character according to certain type (e.g. daughter/not-daughter)

- Algorithm: Gradient Boosting Machine
  - SMOTE sampling, 10-fold cross validation
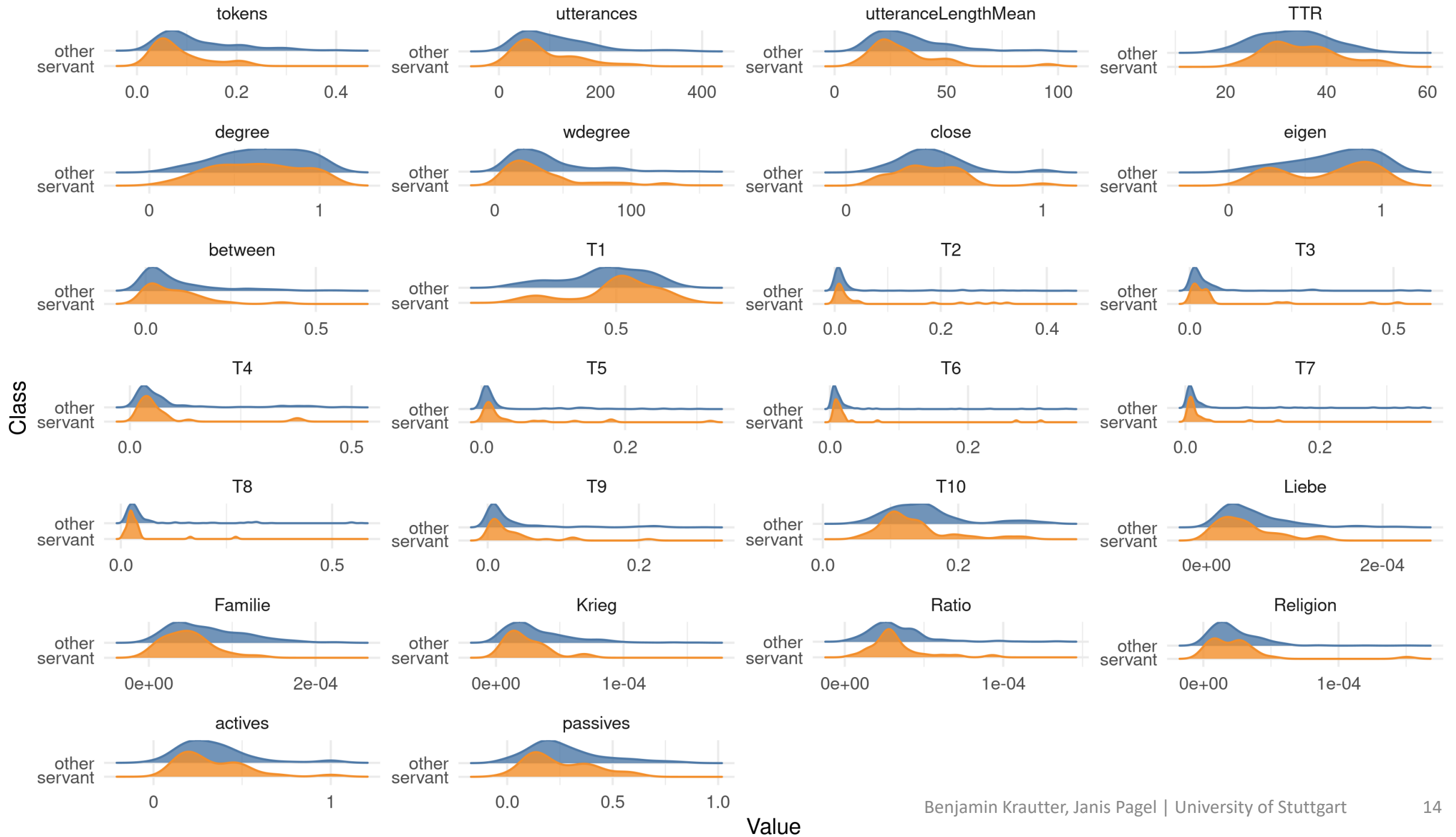
- Use different features

Features

- Number of Uttered Tokens
- Number of Utterances
- Mean Length of Utterances
- Type-Token Ratio (TTR)
- Presence
  - Active and Passive
- Centrality
  - Degree, Weighted Degree, Betweeness, Closeness, Eigenvector
  - Based on co-presence in scenes
- Topics
  - K=10, LDA, Gibbs sampling, no stopwords
- Word Fields (WF)
  - Liebe (love), Familie (family), Krieg (war), Ratio (reason), Religion (religion)

Some characters and features

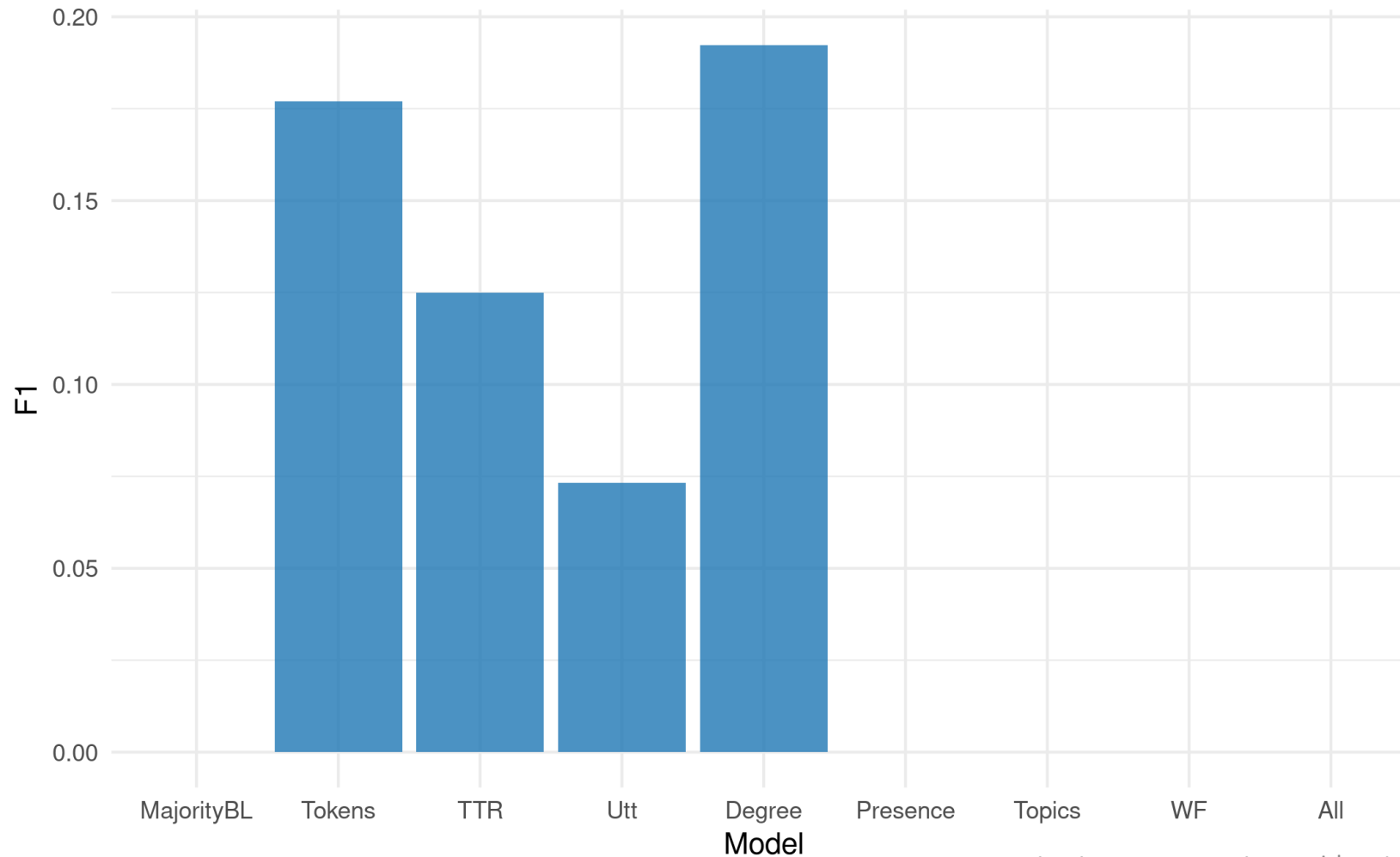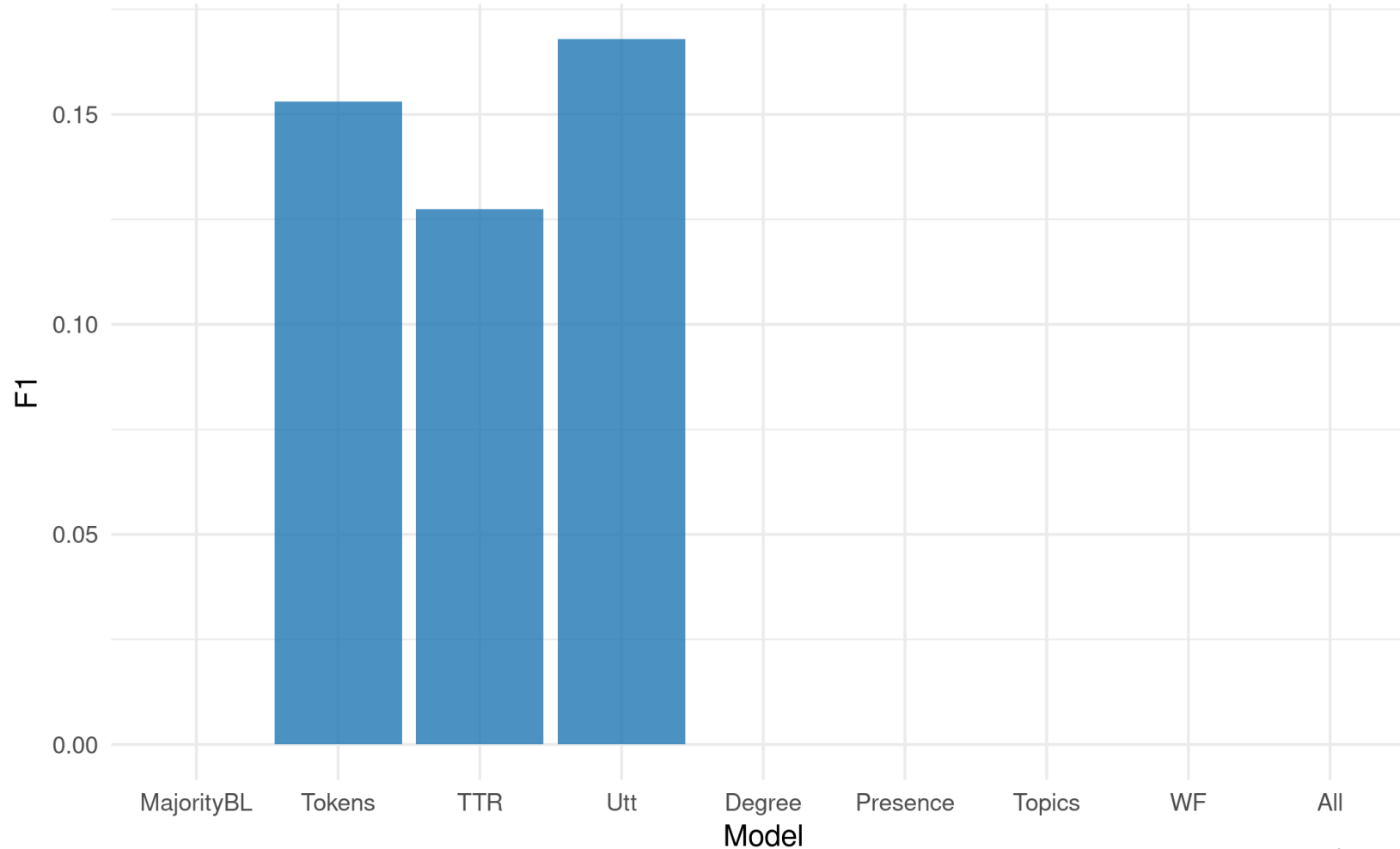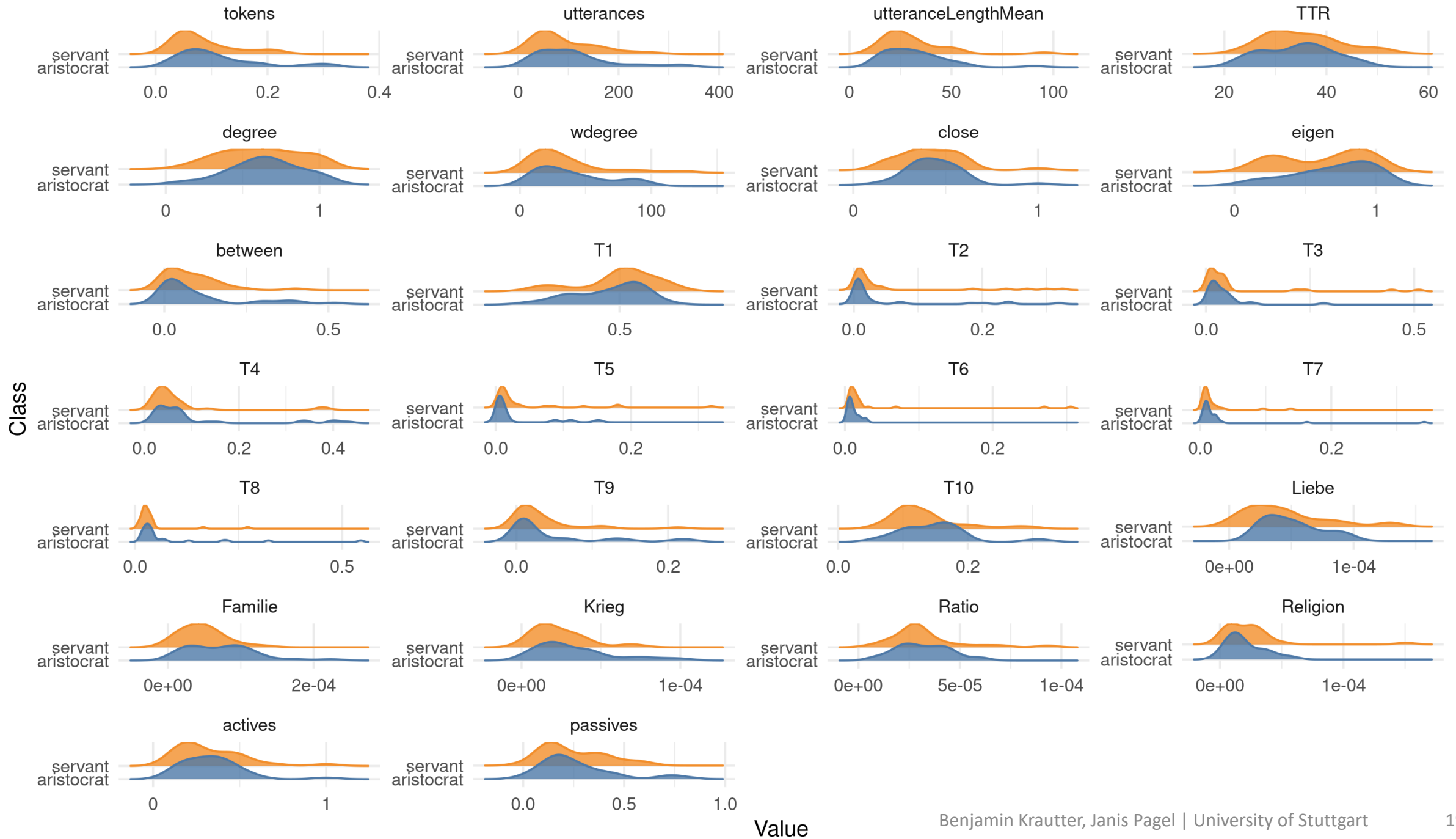| drama	character	tokens	actives	degree	T1	T2	type
11hdv.0	lucie	0.06779232	0.20000000	1.00000000	0.6176890	0.044222539	daughter
n2kq.0	gertrud	0.22376210	0.57142857	0.94444444	0.6461538	0.004172099	daughter
n750.0	julchen	0.21624648	0.47169811	0.85714286	0.4903573	0.005388542	daughter
n750.0	lottchen	0.25063209	0.47169811	1.00000000	0.4920524	0.002805049	daughter
nks0.0	arsene	0.13249041	0.16129032	0.70000000	0.3173317	0.008728180	daughter
ns3r.0	esther	0.06242922	0.20000000	0.92857143	0.4710059	0.016568047	daughter
ns3r.0	rahel	0.11697810	0.00000000	0.85714286	0.4163868	0.009402283	daughter
pkx0.0	klara	0.22483461	0.50000000	0.90000000	0.6034955	0.002398903	daughter
qd2g.0	chrysothemis	0.11619034	1.00000000	1.00000000	0.4945055	0.006993007	daughter
qd2g.0	elektra	0.40191491	1.00000000	1.00000000	0.4988365	0.001745201	daughter

Correlation

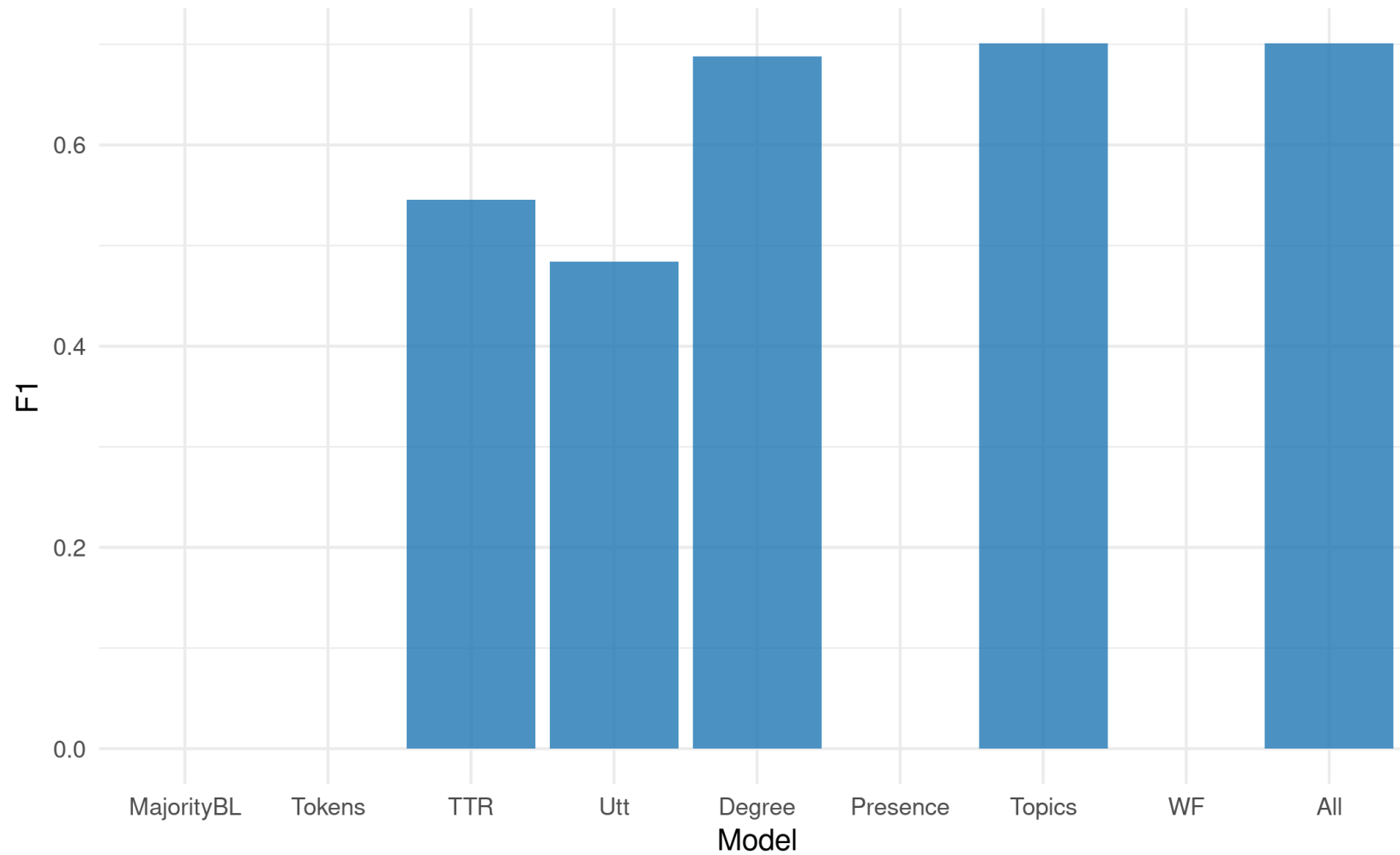# Model Performances (Type: Aristocrat)

Model Performances (Type: Servant)

Look at type pairs for binary classification

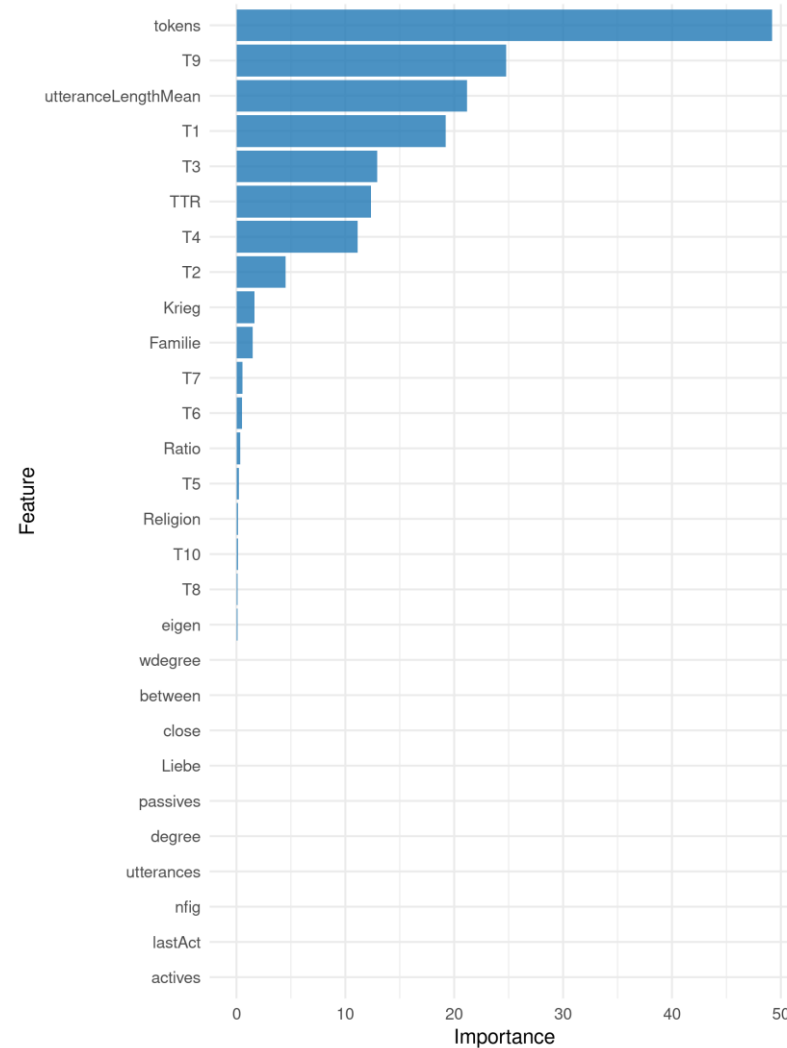| Type	Occurrences
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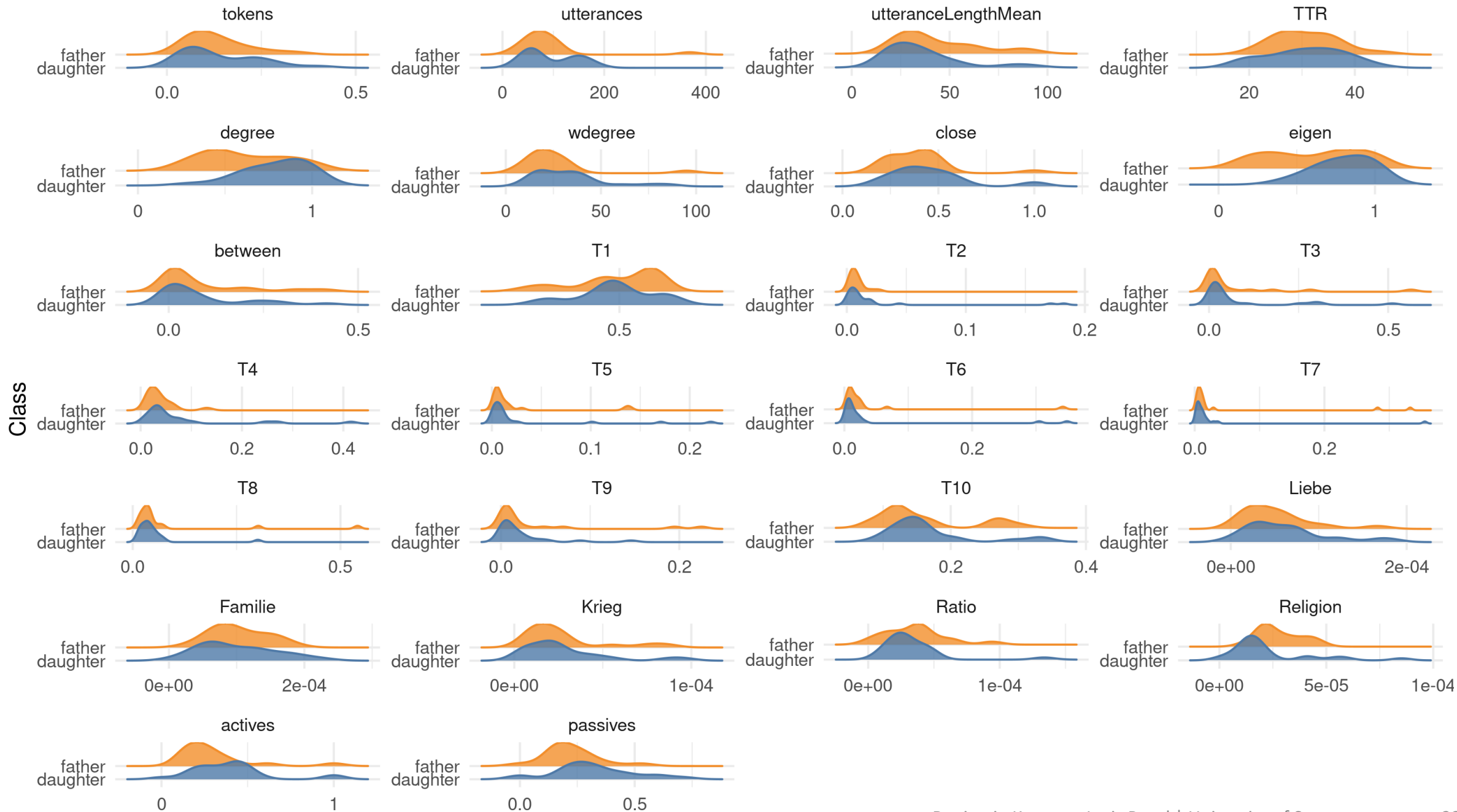| Type	Occurrences
Daughter	23
Father	17

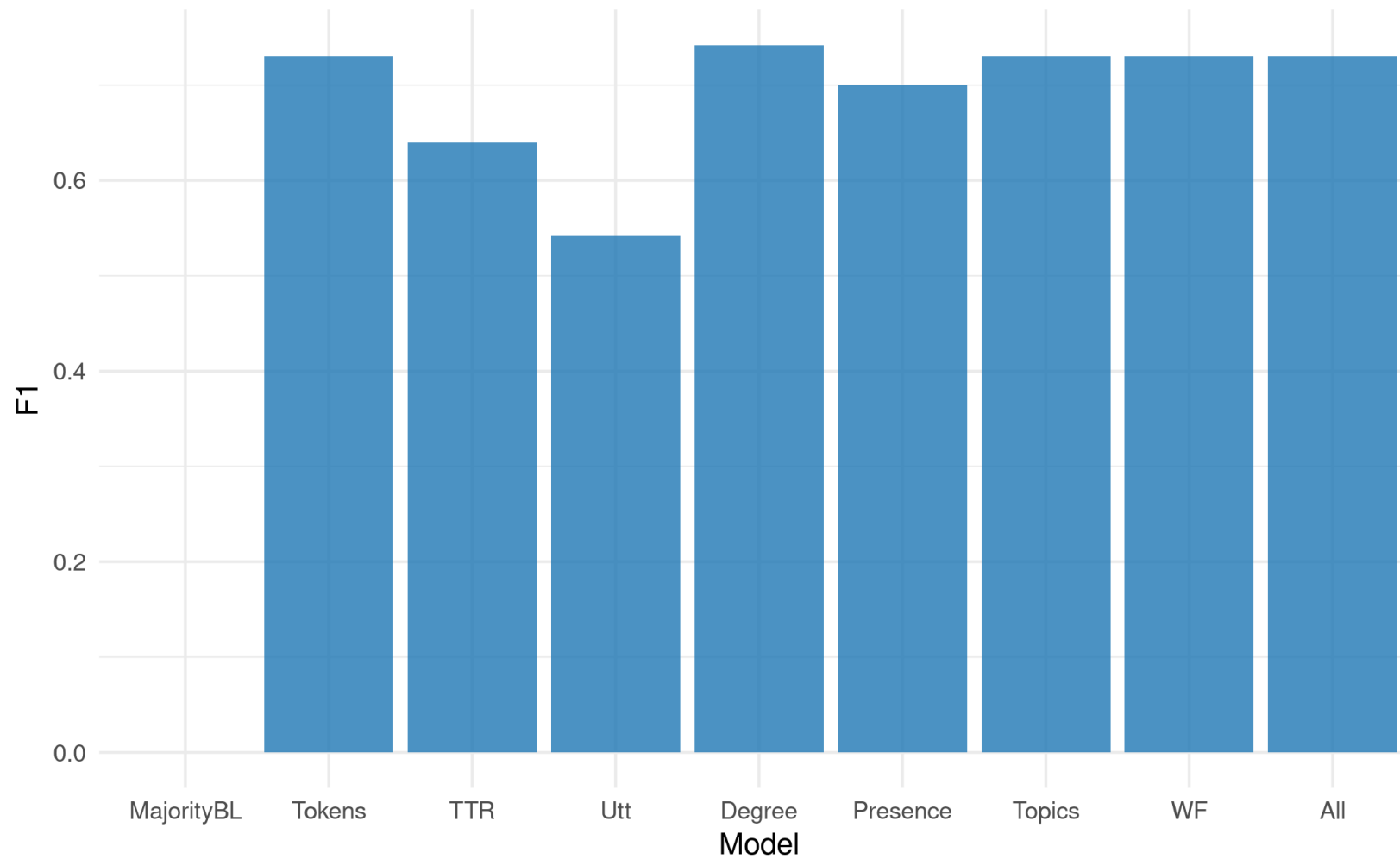# Model Performances (Types: Aristocrat - Servant)

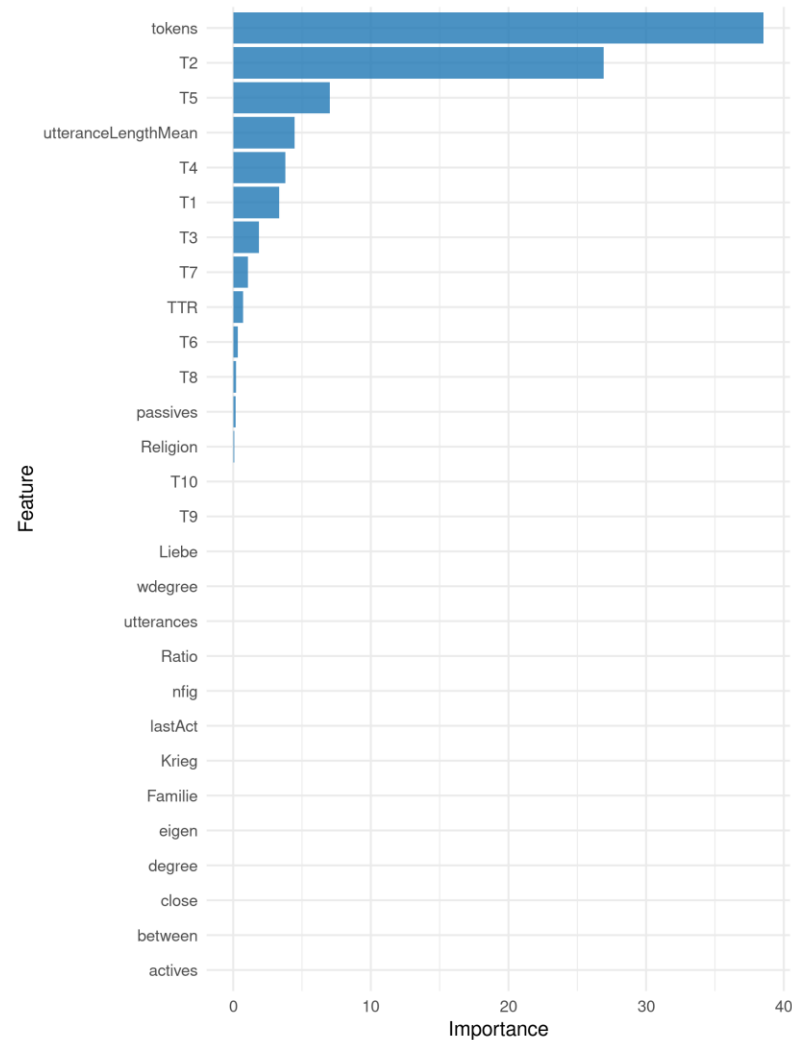# Feature Importance (Model: All, Types: Aristocrat - Servant)

Model Performance (Types: Daughter - Father)

Feature Importance (Model: All, Types: Daughter - Father)

Take-aways

- Single character types not distinguishable from mass of all other types
- Able to distinguish single types from each other
- Possible further steps:
    - Revisit annotation
    - Predict groups of types (rather than single types)
    - Apply classification based on already predicted types
    - Design new features
    - Improve topic models
    - Capture language use
        - Concrete features like nominalisation, which could indicate use of prestigious language
        - Word embeddings
    - Joint learning

Literature

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- Moretti, Franco: "Conjectures on World Literature". In: New Left Review 1 (2000), pp. 54–68.