



Intersectional Perspectives on Changing Geographies of Segregation in the U.S. Care Sector

Daniel Grabner & Linda S. Li

daniel.grabner@wu.ac.at, linda.li@wu.ac.at

Institute for Economic Geography and GIScience,

Department of Socioeconomics,

Vienna University of Economics and Business

Points of departure...

The U.S. care economy

- Bifurcated structure of formal care: well-paying, secure jobs *and* undervalued, precarious care jobs (Duffy 2007; Dwyer 2013; Dwyer & Wright, 2019)
- Long-standing divisions gender, but also racial and ethnic lines
- These divisions call for an intersectional perspective!

Changes in the U.S. care sector

- Institutionalization, professionalization, commodification of care work (Duffy 2005, 2007, 2011)
- Expansion of formal care sector – especially market-organized care (Dwyer 2014; Dwyer & Wright, 2019))
- Substantial increase in low-wage care services
 - as part of larger occupational change and occupational polarization (Autor & Dorn 2013; Dwyer 2013)

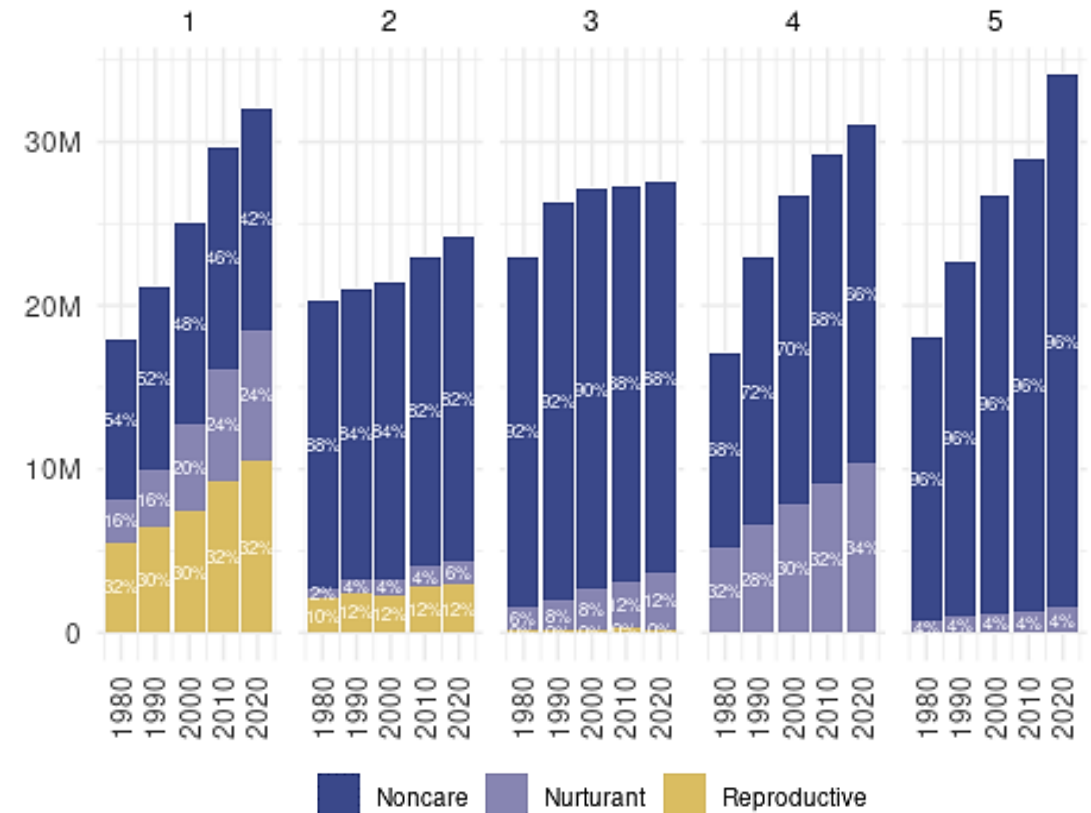
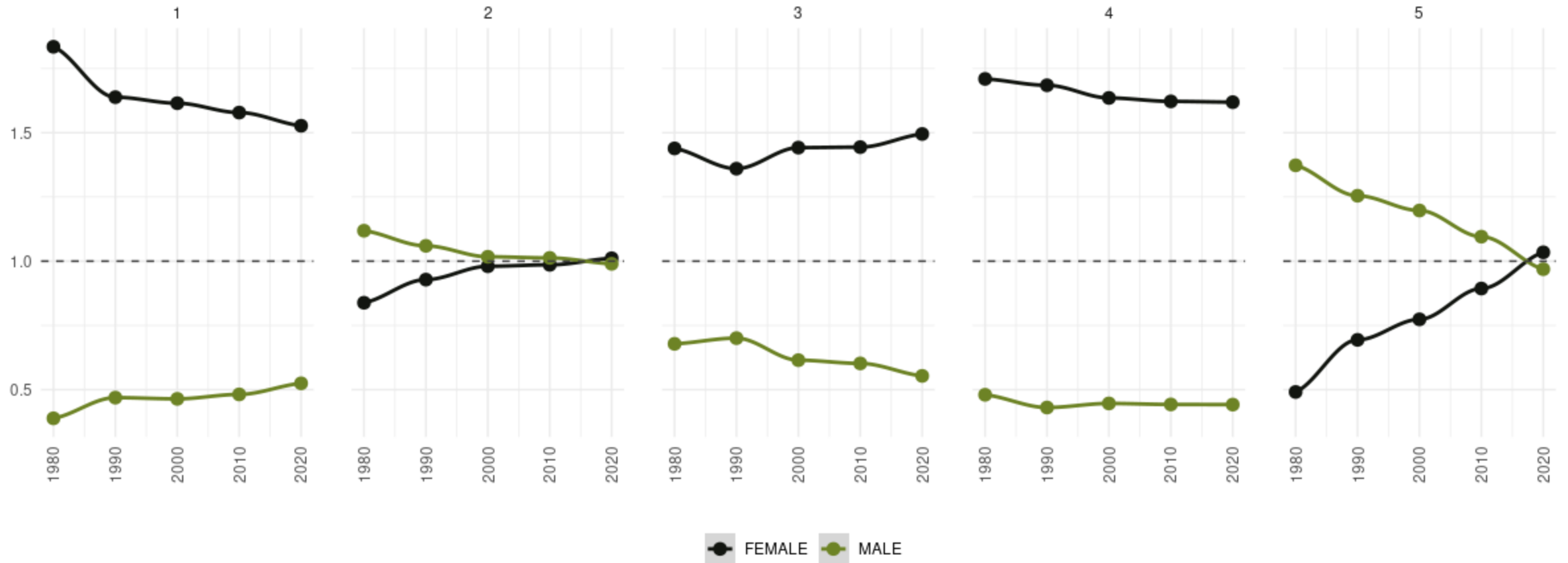


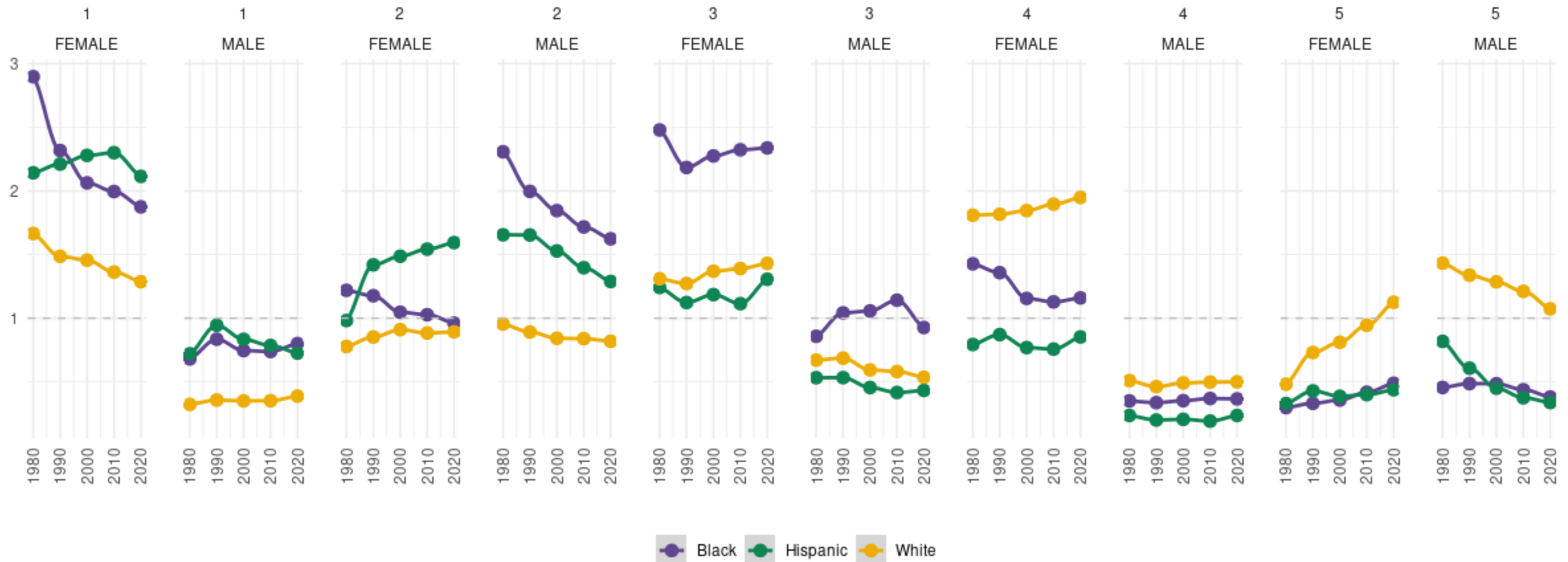
Fig. 1: National time trends by sector type

Relative concentration in the care sector across income quintiles: Men and Women, 1980 to 2020



Relative concentration in the care sector across income quintiles:

By genders and selected racial-ethnic groups, 1980 to 2020



Points of departure...

The U.S. care economy

- Bifurcated structure of formal care: well-paying, secure jobs *and* undervalued, precarious care jobs (Duffy 2007; Dwyer 2013; Dwyer & Wright, 2019)
- Long-standing divisions gender, but also racial and ethnic lines
- These divisions call for an intersectional perspective!

Changes in the U.S. care sector

- Institutionalization, professionalization, commodification of care work (Duffy 2005, 2007, 2011)
- Expansion of formal care sector – especially market-organized care (Dwyer 2014; Dwyer & Wright, 2019))
- Substantial increase in low-wage care services
 - as part of larger occupational change and occupational polarization (Autor & Dorn 2013; Dwyer 2013)

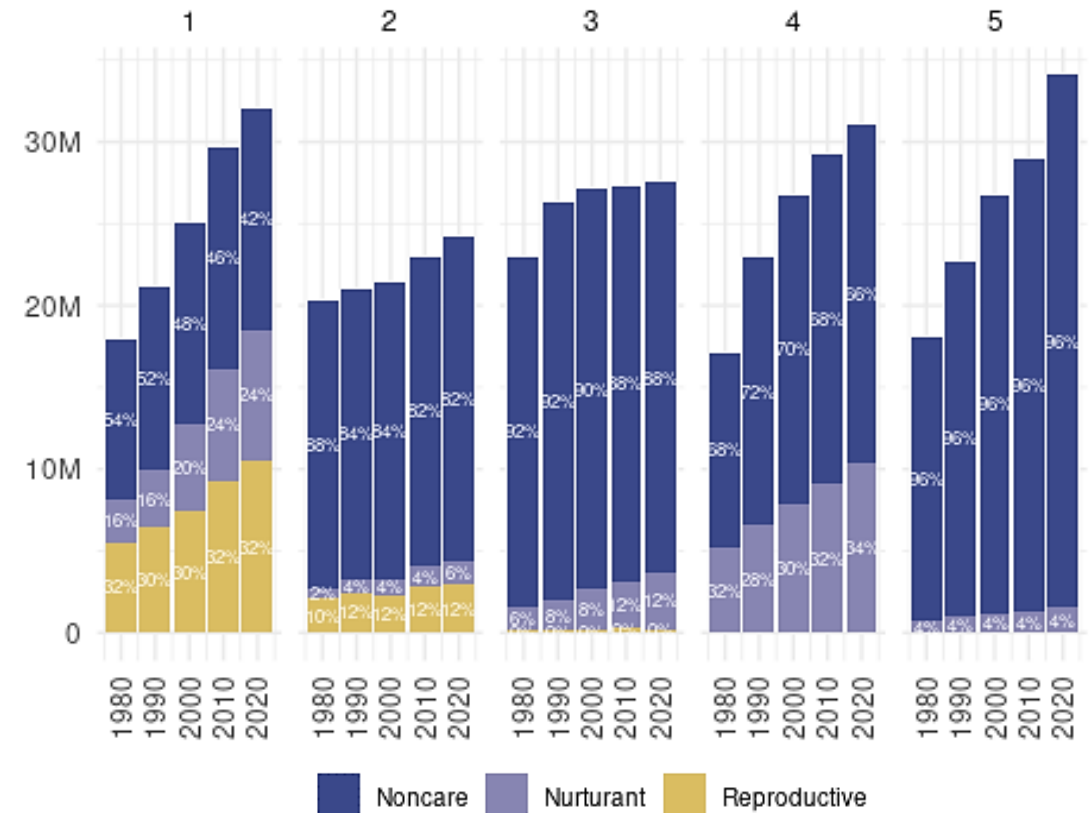


Fig. 1: National time trends by sector type

Points of departure...

The U.S. care economy

- Bifurcated structure of formal care: well-paying, secure jobs *and* undervalued, precarious care jobs (Duffy 2007; Dwyer 2013; Dwyer & Wright, 2019)
- Long-standing divisions gender, but also racial and ethnic lines
- These divisions have become more pronounced in the perspective of the care economy

Changes in the care economy

- Institutionalization, professionalization, commodification of care work (Duffy 2005, 2007, 2011)
- Expansion of formal care sector – especially market-organized care (sources)
- Substantial increase in low-wage care services
 - as part of larger occupational change and occupational polarization (Autor & Dorn 2013; Dwyer 2013)

How are long-standing intersectional hierarchies and segregation in care affected by this?

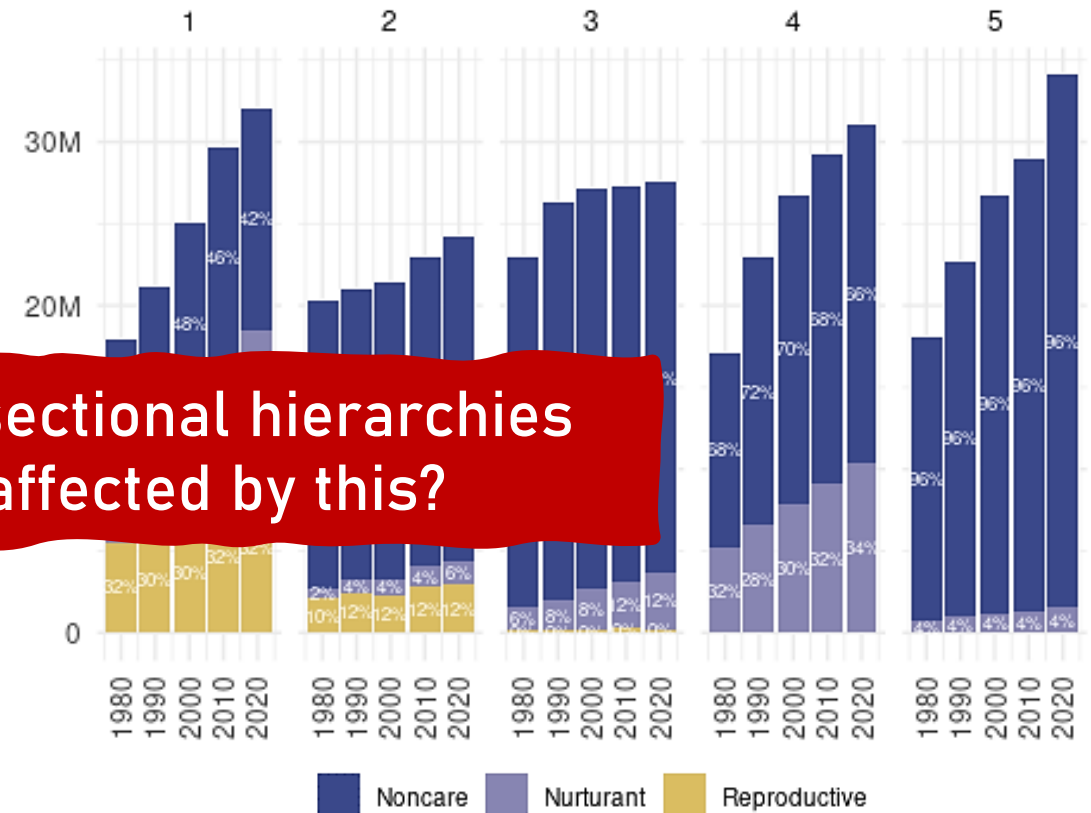


Fig. 1: National time trends by sector type

Intersectional work on (care) labour

Recent empirical studies have incorporated an intersectional lens to examine gendered and racialized hierarchies within the care sector (Duffy, 2007, 2015; Mintz & Krymkowski, 2010; Alonso-Villar, et al, (2012); Dwyer, 2013; Del Rio & Alonso-Villar, 2015; Budig et al, 2018; Hodges, 2020; Østbakken et al., 2022).

Duffy's (2007) historical account on ,dirty' reproductive care work between 1900 and 1990:

- Women's overrepresentation in reproductive care work decreased substantially
- Racialized division decreased as well, but to a lesser extent
- Role of racialized men in reproductive care increased

Intersectional work on (care) labour

Recent empirical studies have incorporated an intersectional lens to examine gendered and racialized hierarchies within the care sector (Duffy, 2007, 2015; Mintz & Krymkowski, 2010; Alonso-Villar, et al, (2012); Dwyer, 2013; Del Rio & Alonso-Villar, 2015; Budig et al, 2018; Hodges, 2020; Østbakken et al. 2022).

Duffy's (2007 and 1990:

While these studies fruitfully employ an intersectional lens, their focus on national averages runs the risk of masking regional differences.

- Women's overrepresentation in reproductive care work decreased substantially
- Racialized division decreased as well, but to a lesser extent
- Role of racialized men in reproductive care increased

A geography of care


*“If race and gender are socially constructed systems, then they must arise at specific moments in particular circumstances and change as these circumstances change. [...] [O]ne vantage point for looking their development in the United States is in the changing division of labor in **local economies**.”* – Evelyn Nakano Glenn
1992: 34

A geography of care

*“If race and gender are socially constructed systems, then they must arise at specific moments in particular circumstances and change as these circumstances change. [...] [O]ne vantage point for looking their development in the United States is in the changing division of labor in **local economies**.”* – Evelyn Nakano Glenn 1992: 34

Care activities are mostly *non-tradable* or *place-bound*:

- Care activities are intimately tied to place and cannot simply be offshored away (Duffy, 2011; Tiebout, 1956a, 1956b; Thulin 2015).
- They are embedded in often path-dependent local structures such as industrial composition, cultural norms, and systems of segregation, which crucially shape the gendered and racialized provision of care (Glenn, 1992; Lightman, 2017).

- 
- (1) How have intersectional hierarchies in the provision of care work changed in recent decades?
 - (2) Can we identify unique regional patterns of care segregation in the U.S., and what factors contribute to these distinctions?
 - (3) If so, do patterns in regional care work regimes change or persist over time?
-

Data

Data source	<ul style="list-style-type: none">• U.S. Decadal Census and the American Community Survey (ACS)• 1980, 1990, 2000, 2010, and 2020
Occupational classifications	<ul style="list-style-type: none">• Time-consistent occupations: care occupations drawing on Duffy (2005: 75)• Quintile income groups: care occupations are grouped based on median occupational income
Spatial unit of analysis	<ul style="list-style-type: none">• Commuting zones (CZ): should approximate local labor markets• 741 CZs in the U.S.
Potential problems: small unit bias problem	<ul style="list-style-type: none">• Segregation indices may be biased upward for small samples, which is less of a problem for national averages• Our approach: only distinguish between two racial groups: (i) white non-Hispanics and (ii) sum of Asian, Black, Hispanic, Native American, and Other populations• Biased CZs are excluded: 421/741 CZs (still 90% of the US population)

Measuring segregation

Our two main measures of segregation:

1. Relative concentration (RC) =
$$\frac{\text{Share of group A in unit B}}{\text{Share of group A in total population}}$$

- E.g., the share of Hispanics in the care sector is 30%, their share in the total population is 20%, then the relative concentration is 1.5.
- $RC = 1$... proportional representation
- $RC > 1$... group A is overrepresented
- $RC < 1$... group A is underrepresented

2. Multi-group Duncan dissimilarity index $D^* \in [0,1]$

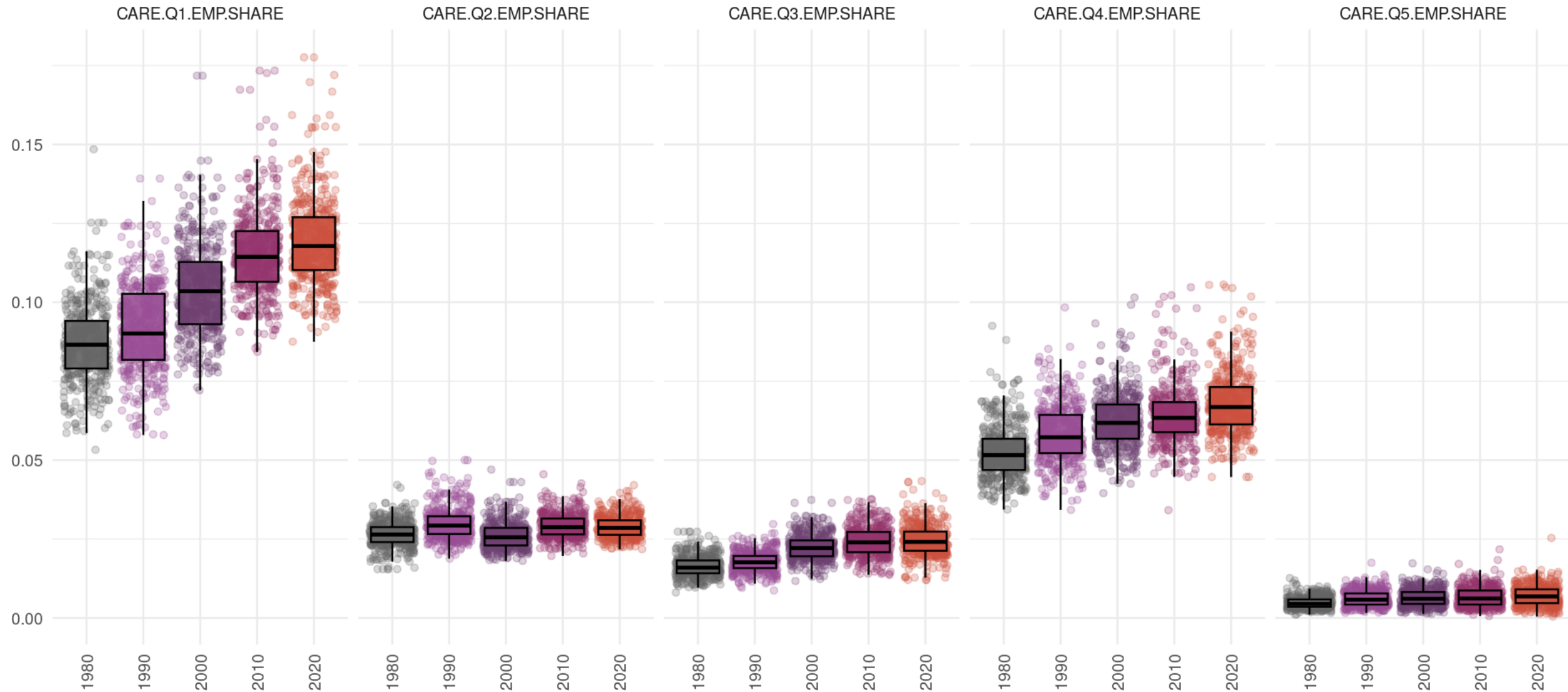
- Measures the unevenness of a group's spatial distribution compared to another group
- Interpretation: the share of the group that would have to move to achieve an even distribution (Tivadar 2019)



Some preliminary Results

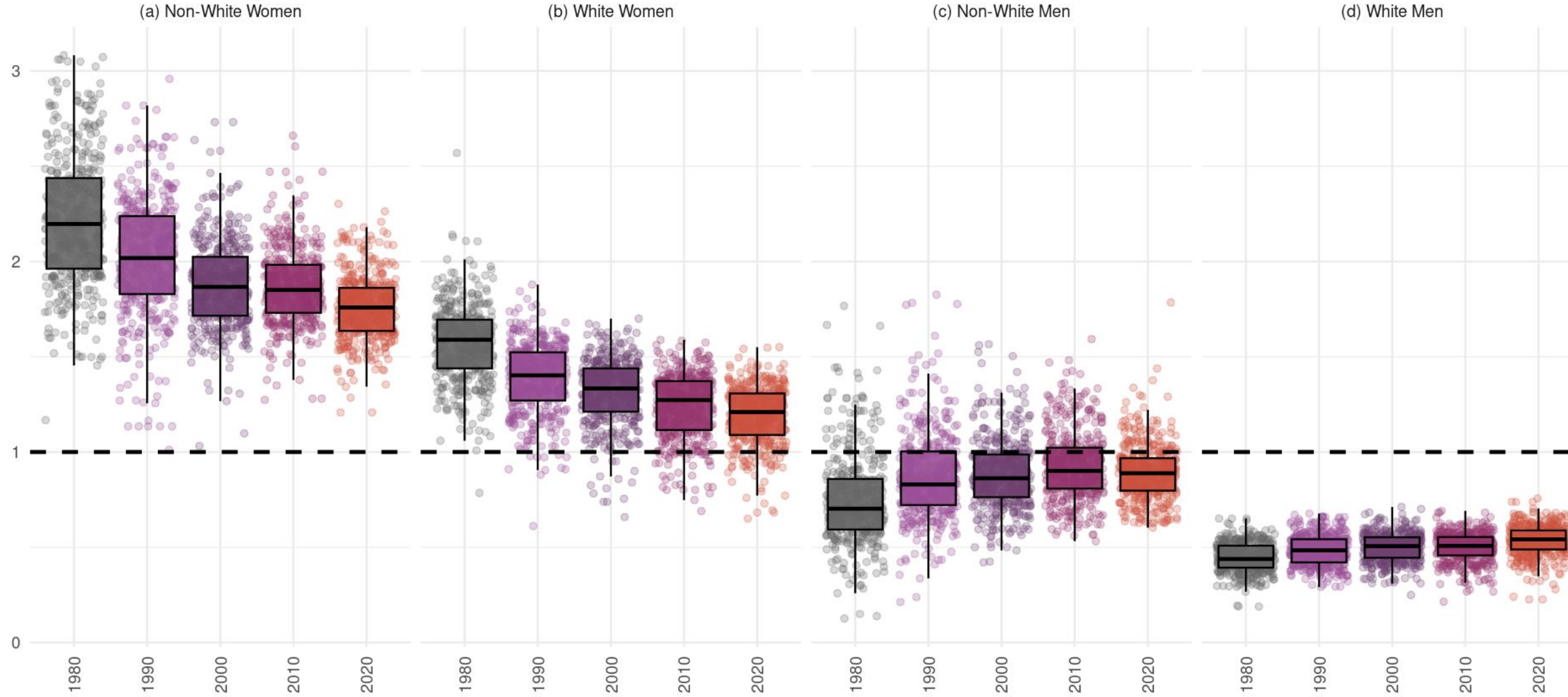
The expansion of care and low-wage care labour across regions

Regional shares of care employment by income quintile



Care hierarchies can be found on a regional level, but with considerable variation

Relative concentration in bottom-quintile care occupations



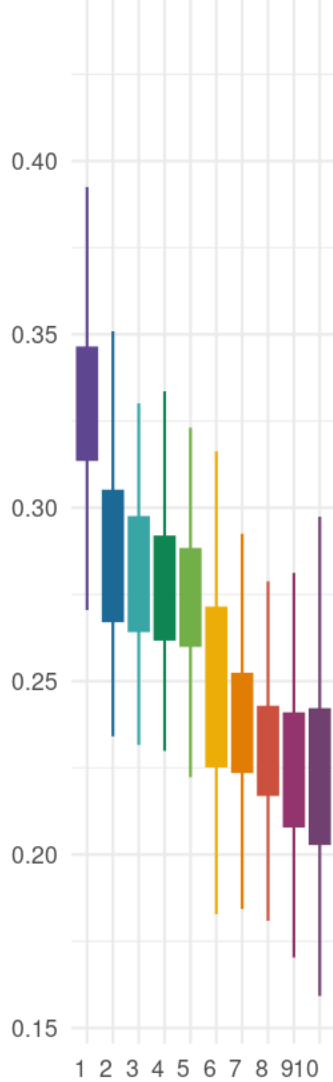
Are there distinct regional regimes of segregation in care work?

Our approach: **A latent profile analysis (LPA)**

- (a) Identifying unobserved (latent) structure (i.e. profiles) within a population based on observable indicator variables.
- (b) Each observation gets assigned to one of K profiles.
- (c) Sample consists of 2105 observations (421 commuting zones times 5 years).
- (d) Indicator variables
 - (i) Racial composition
 - (ii) Relative concentration in low-wage care occupations
 - (iii) Duncan's dissimilarity index:
 - of women and men + white and racial-ethnic workers
 - in care-sector + non-care-sector income quintiles

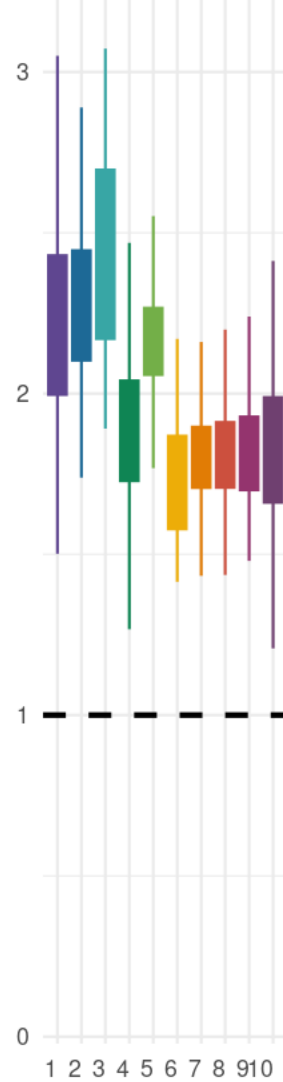
Dissimilarity Index

(4) D Sex&Race/Ethnicity

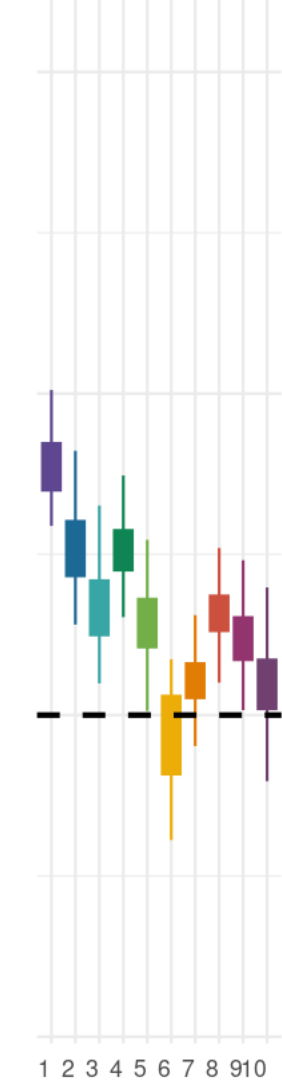


Relative concentration indices

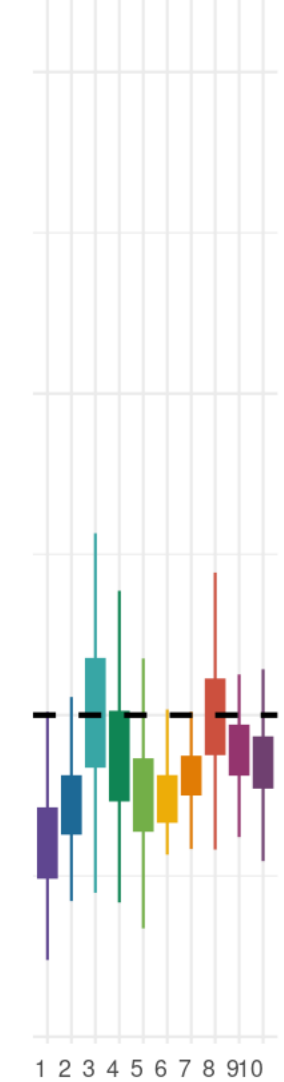
(5) RC non-white women



(6) RC white women



(7) RC non-white men

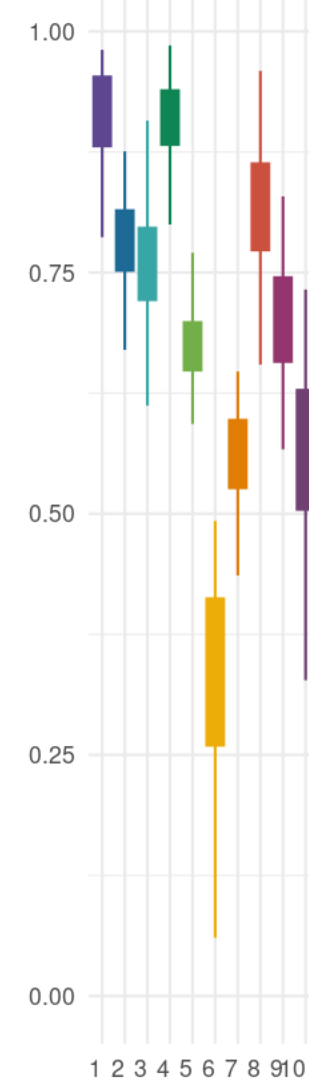


(8) RC white men

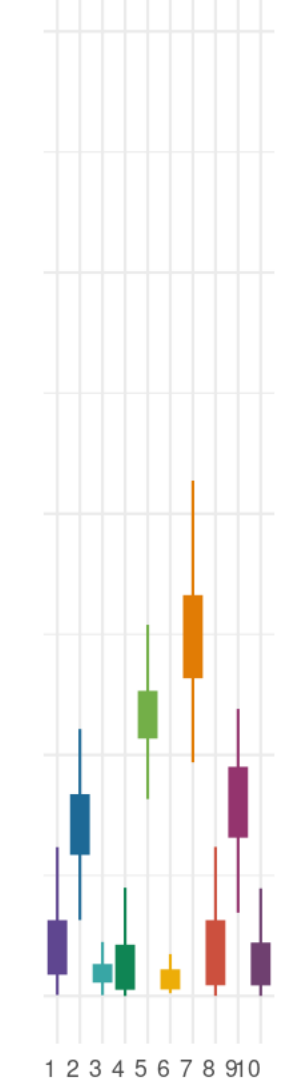


Racial composition

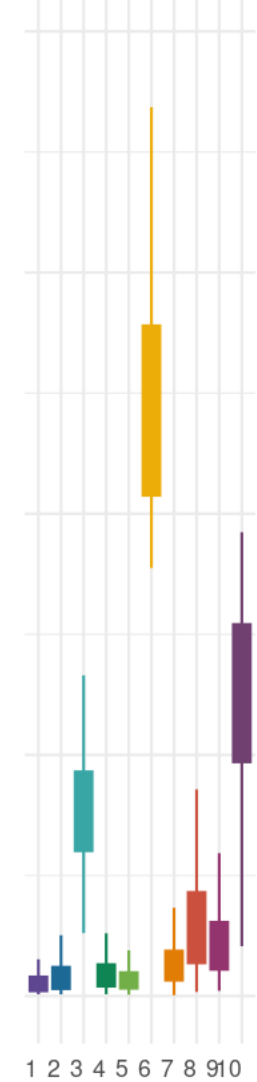
(1) Share white



(2) Share black

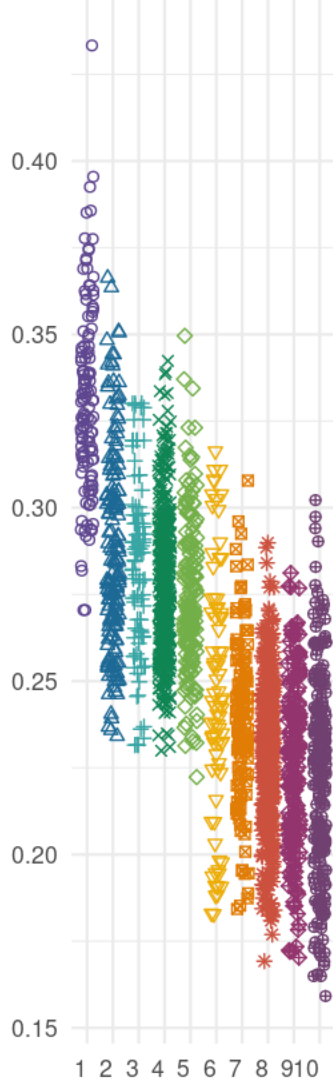


(3) Share hispanic



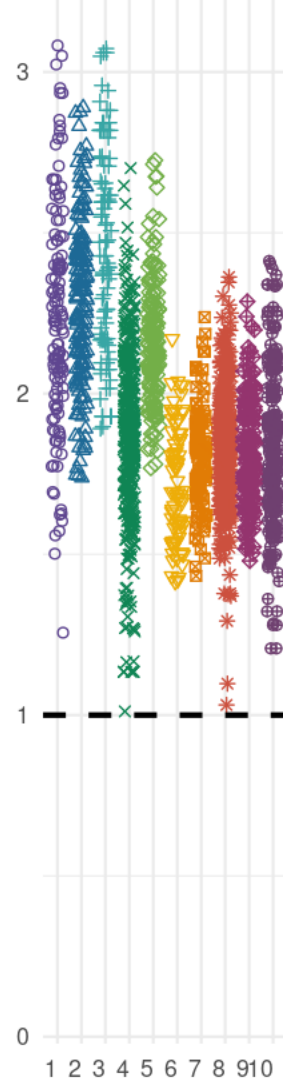
Dissimilarity Index

(4) D Sex&Race/Ethnicity

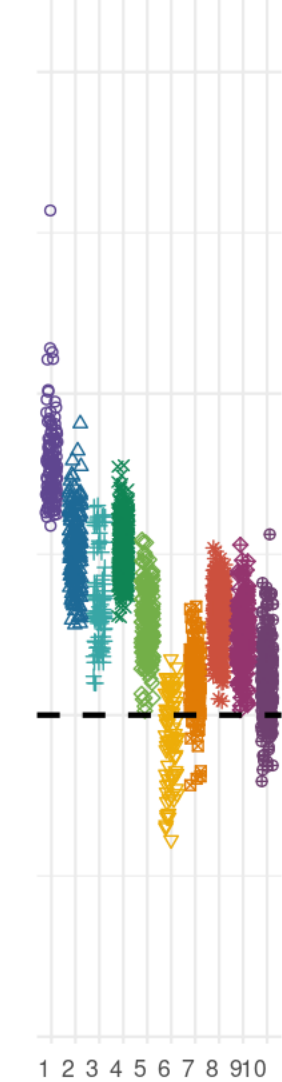


Relative concentration indices

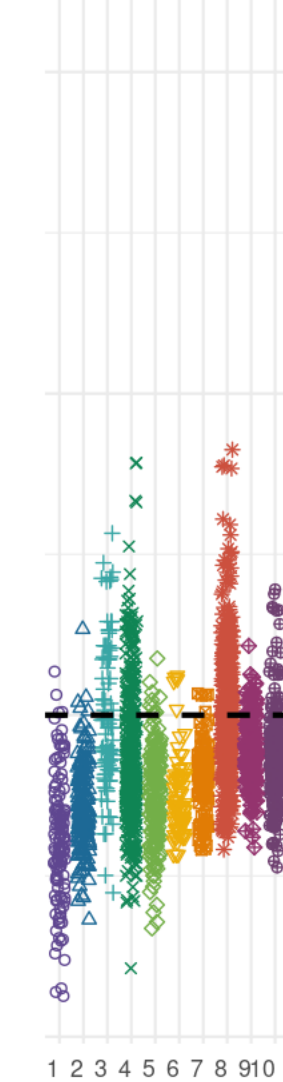
(5) RC non-white women



(6) RC white women



(7) RC non-white men

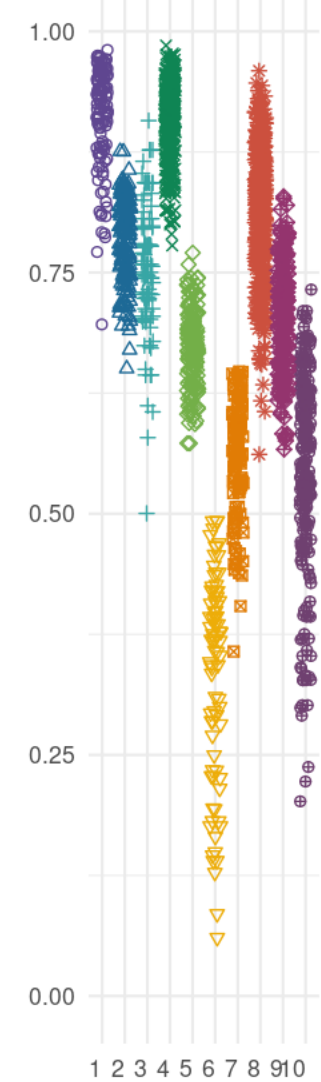


(8) RC white men

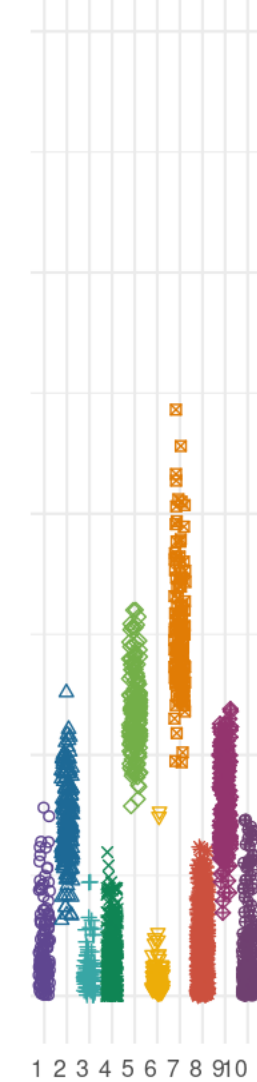


Racial composition

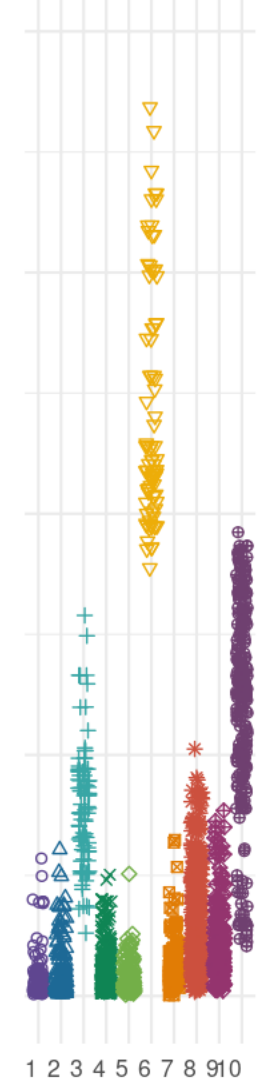
(1) Share white



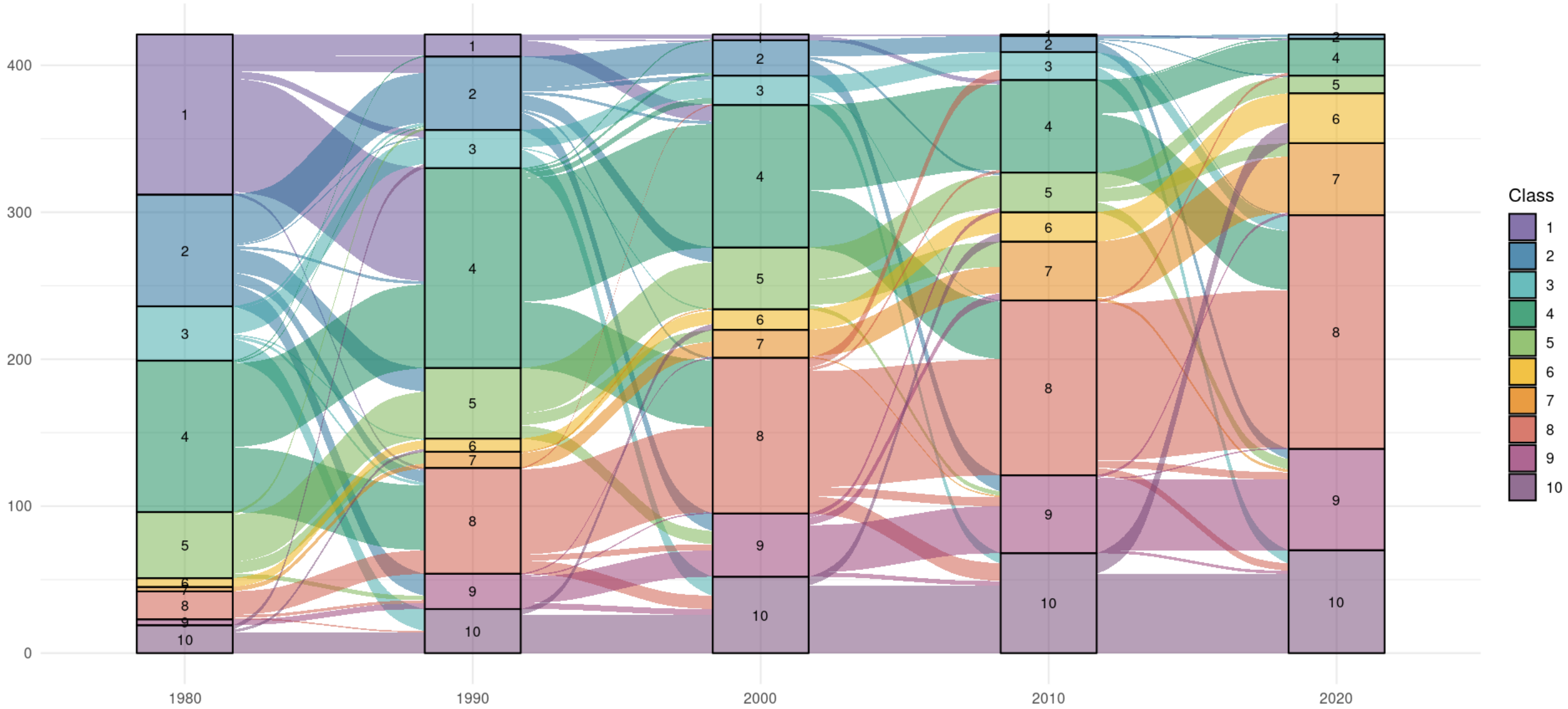
(2) Share black



(3) Share hispanic

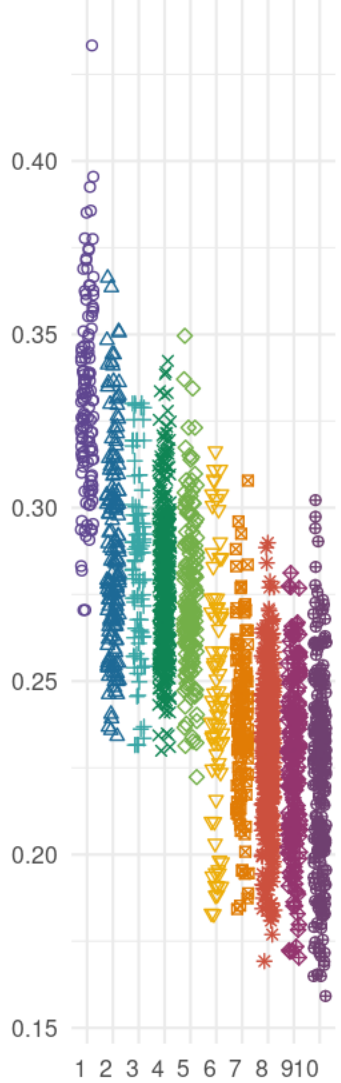


LPA Profile transitions



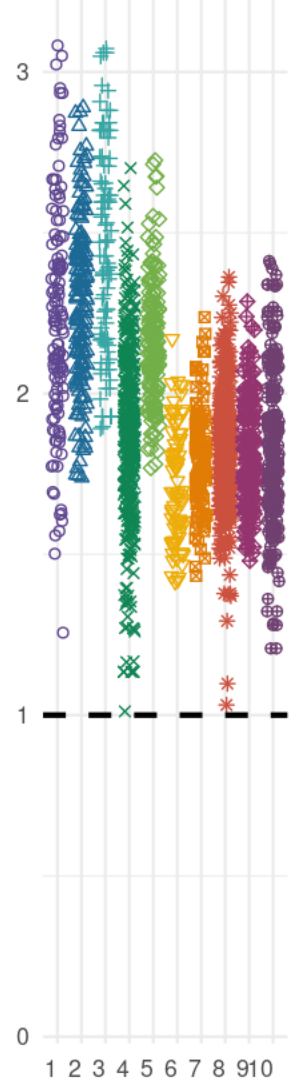
Dissimilarity Index

(4) D Sex&Race/Ethnicity

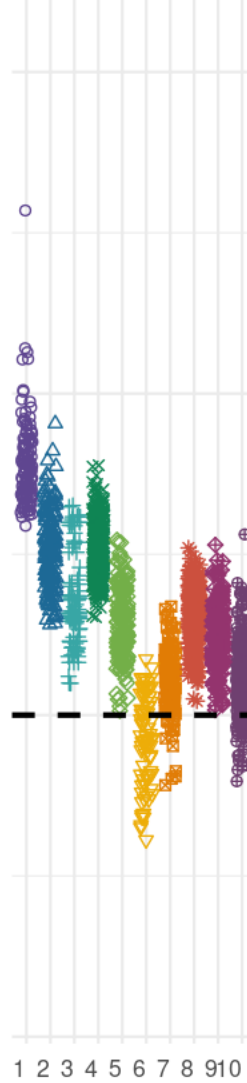


Relative concentration indices

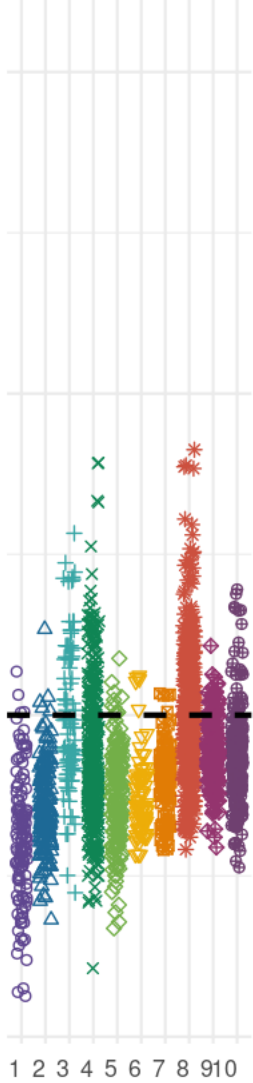
(5) RC non-white women



(6) RC white women



(7) RC non-white men

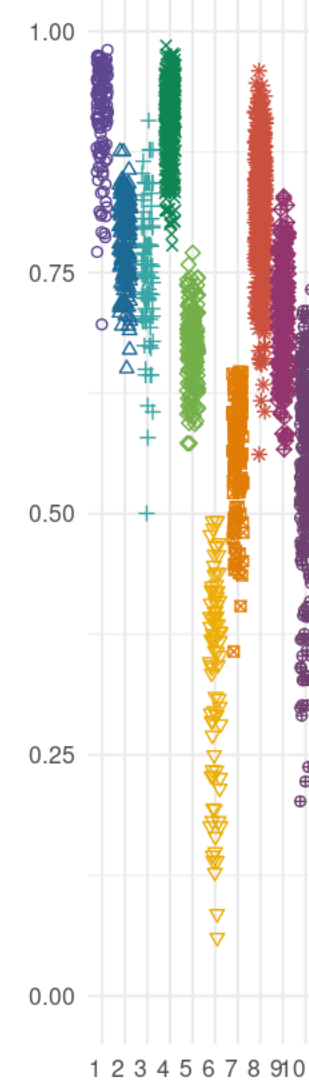


(8) RC white men

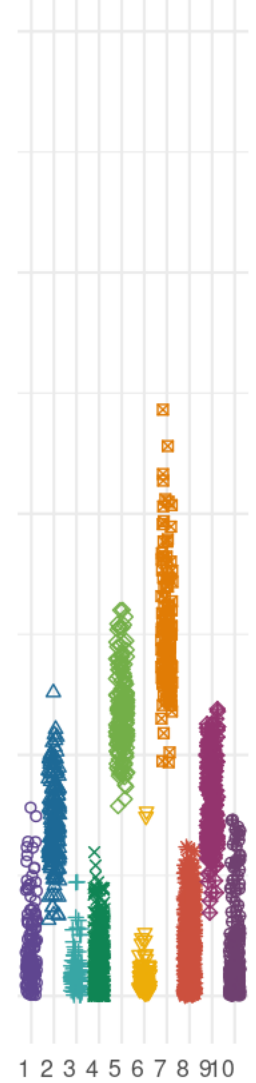


Racial composition

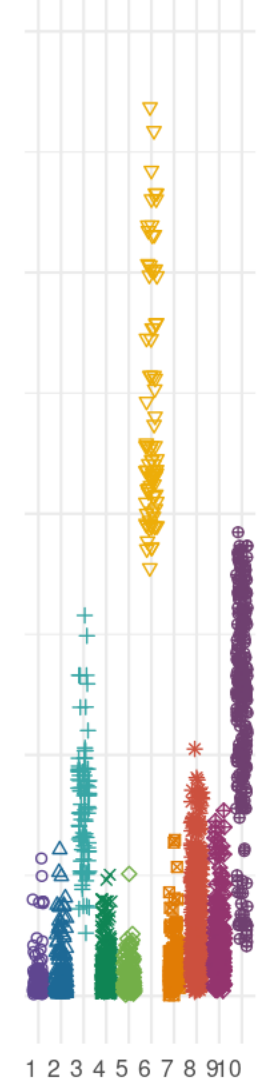
(1) Share white



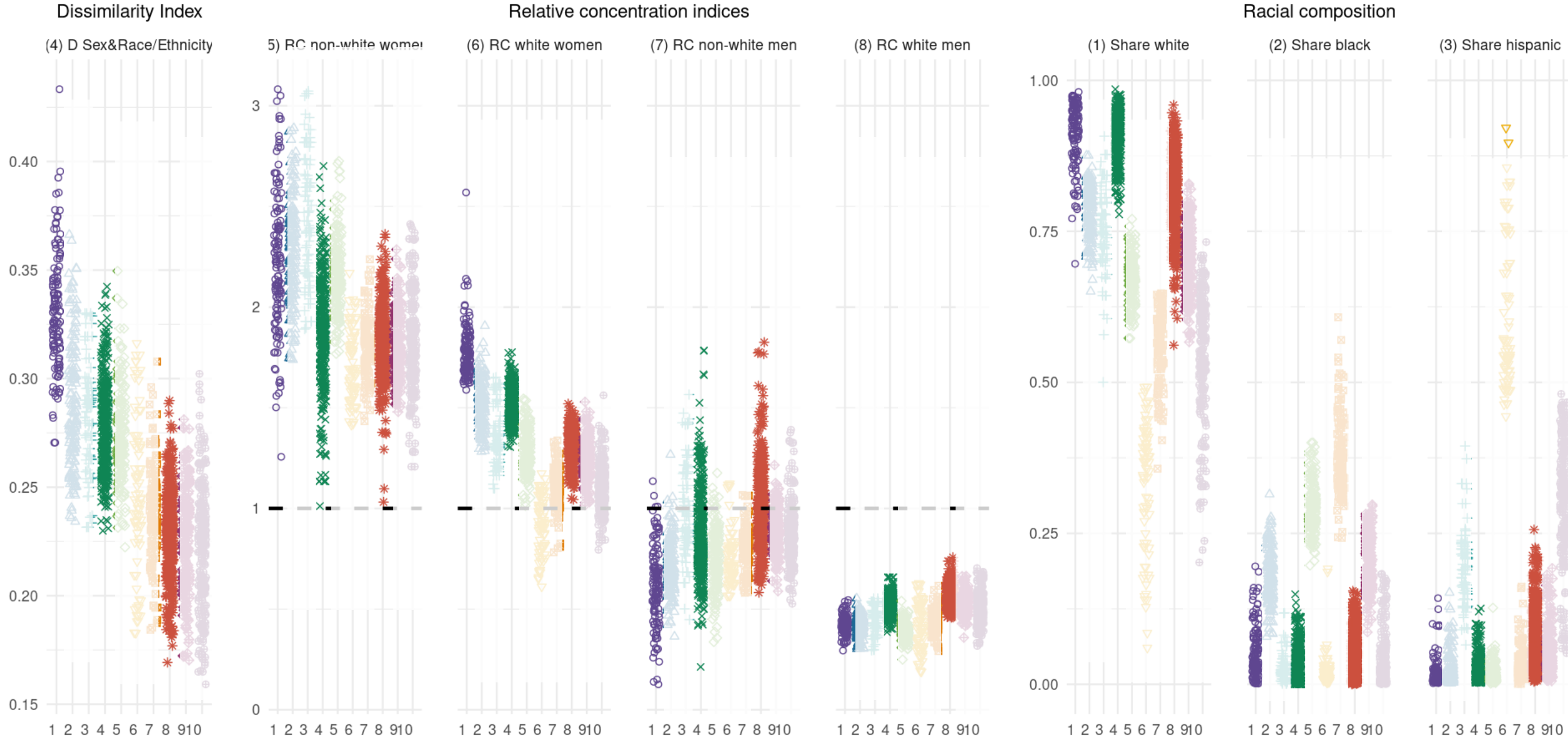
(2) Share black



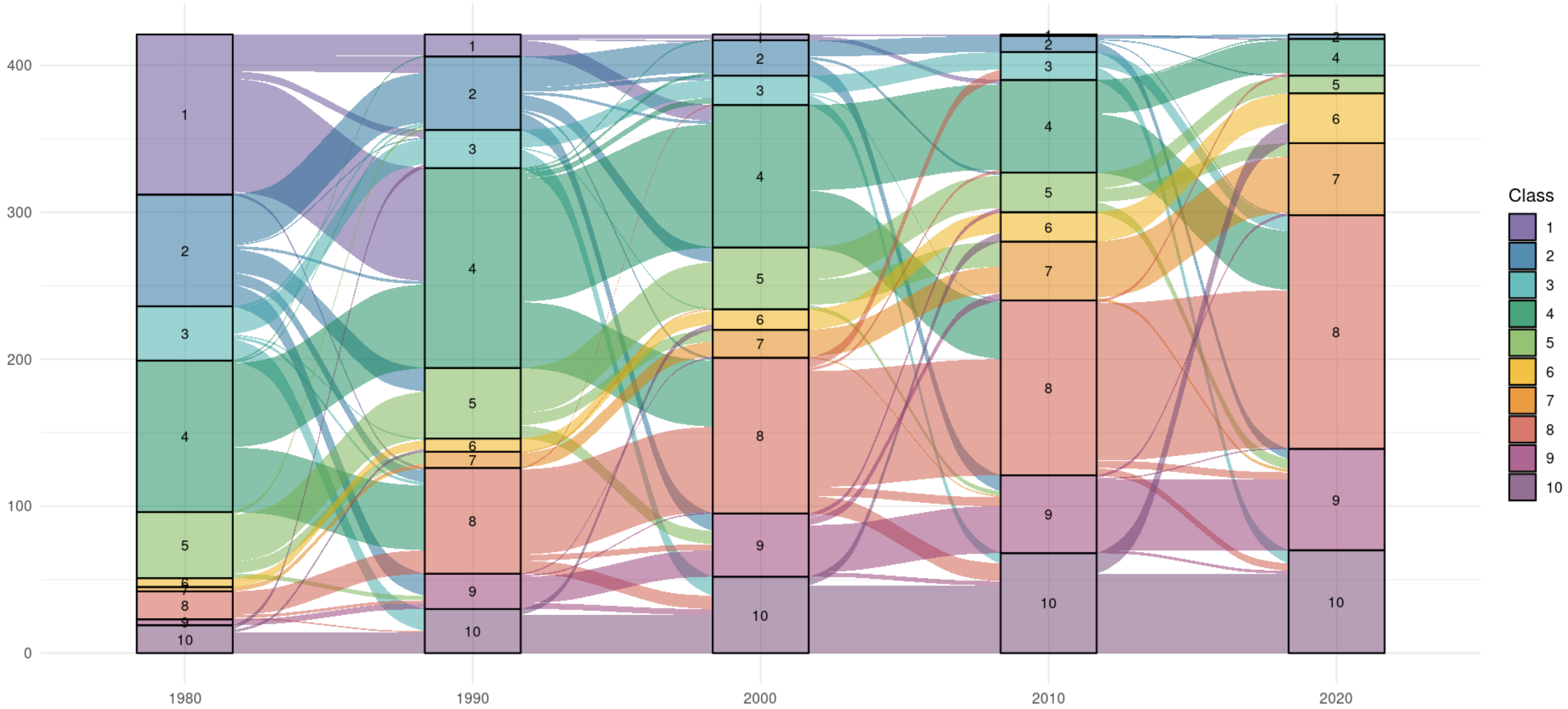
(3) Share hispanic



Classes with the highest share of white people

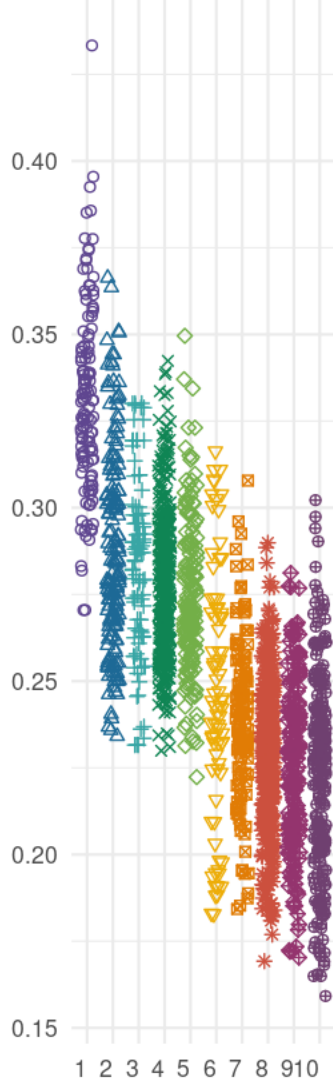


LPA Profile transitions



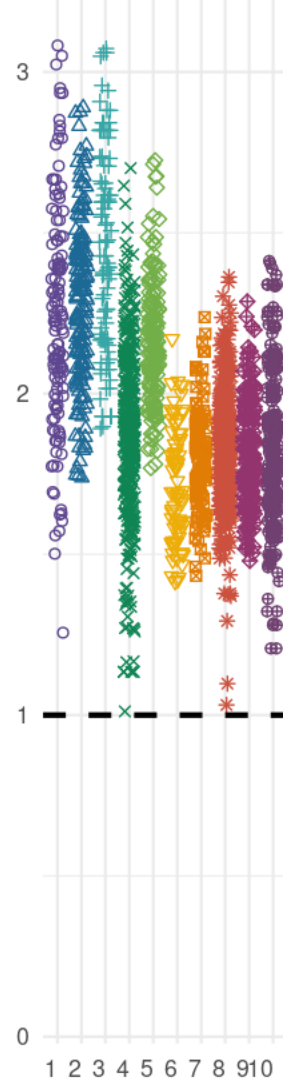
Dissimilarity Index

(4) D Sex&Race/Ethnicity

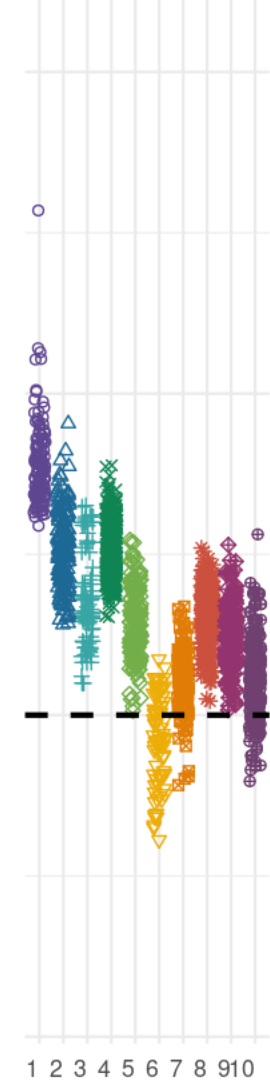


Relative concentration indices

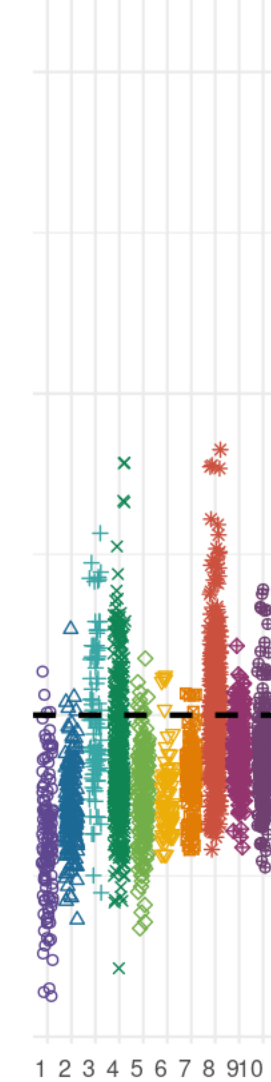
(5) RC non-white women



(6) RC white women



(7) RC non-white men

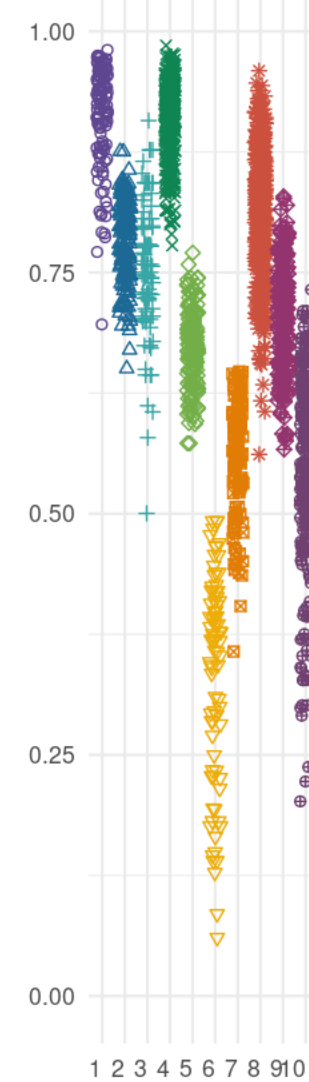


(8) RC white men

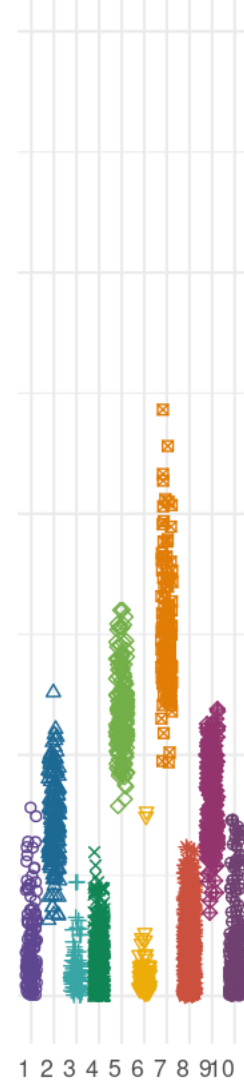


Racial composition

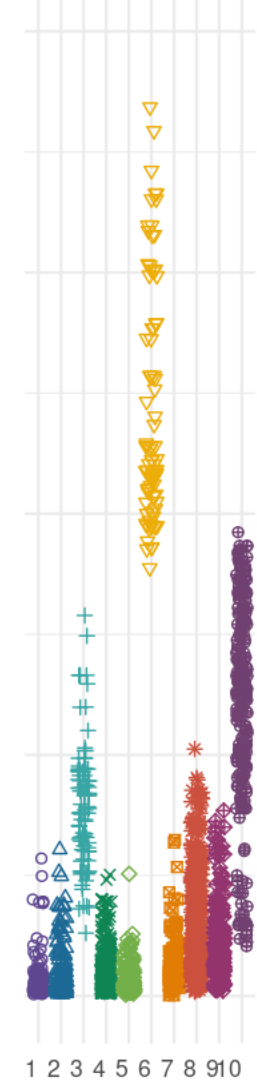
(1) Share white



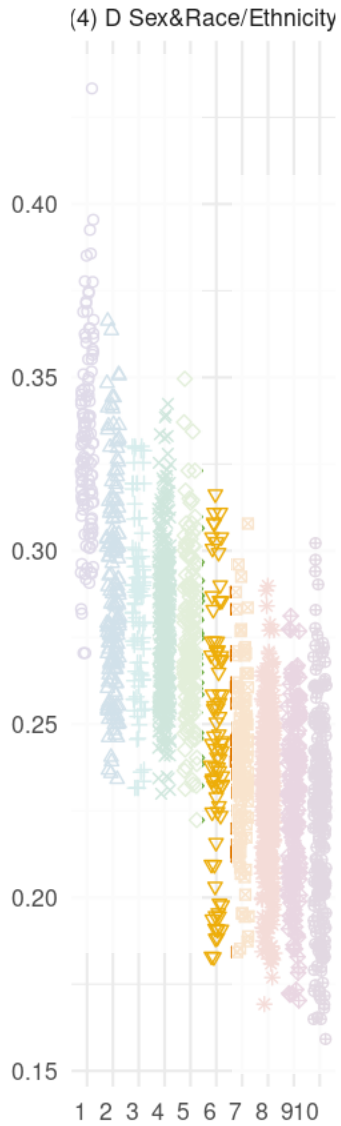
(2) Share black



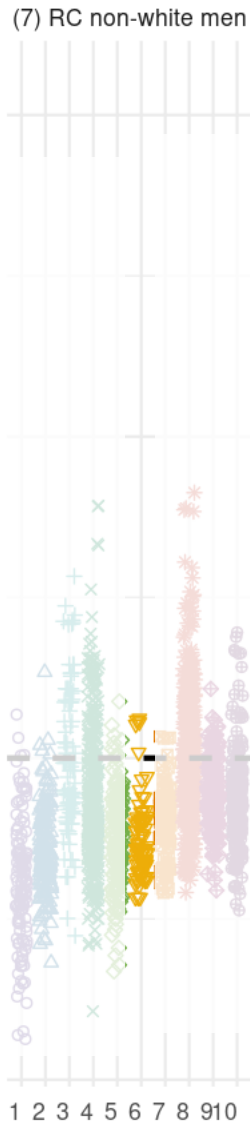
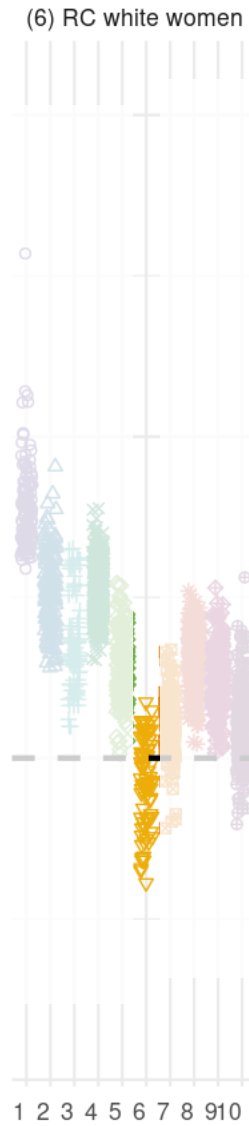
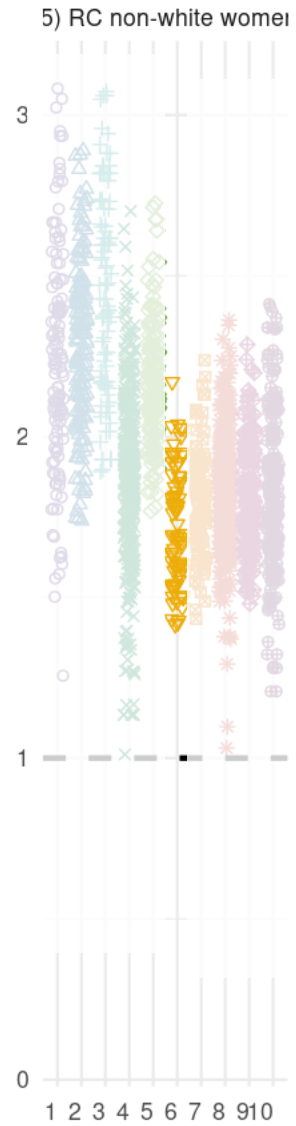
(3) Share hispanic



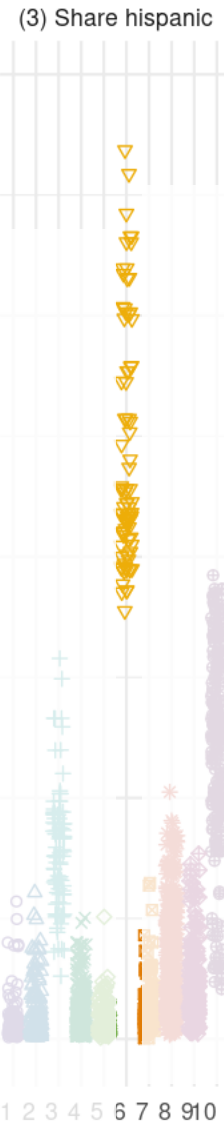
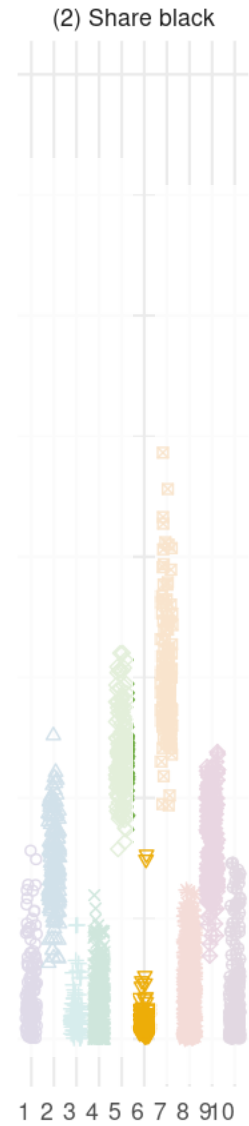
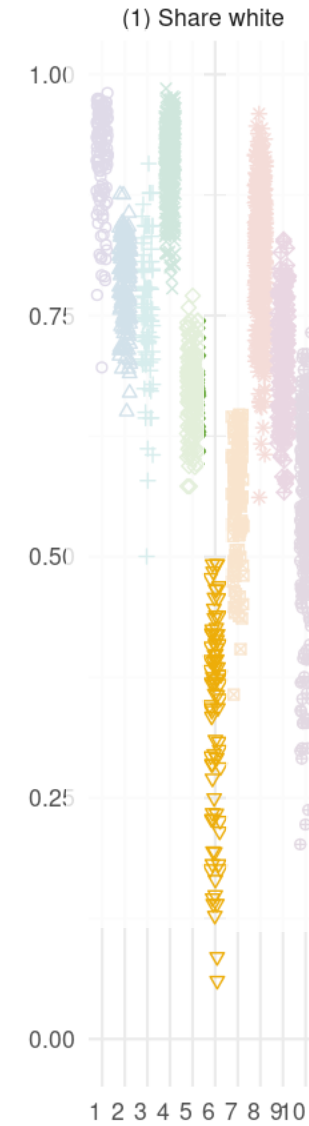
Dissimilarity Index



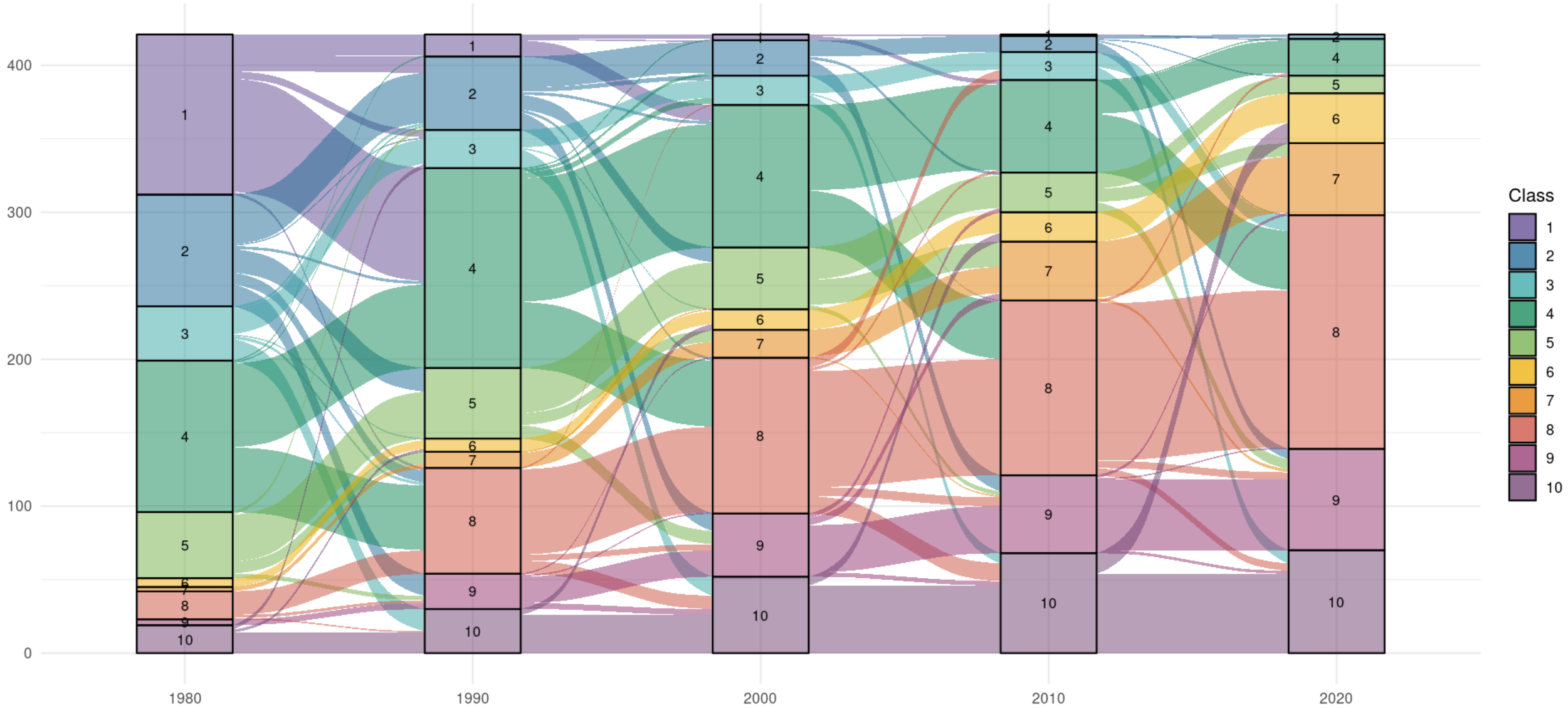
Relative concentration indices



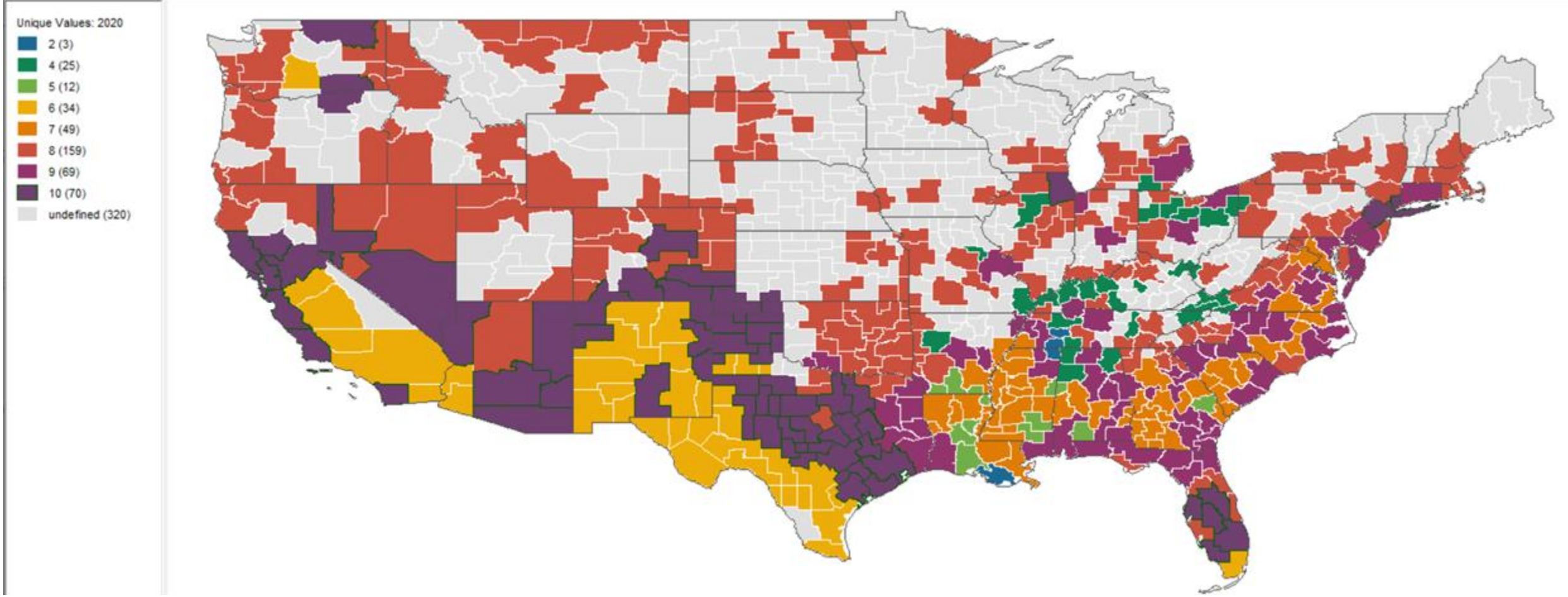
Racial composition



LPA Profile transitions



Spatial distribution of LPA classes for 2020





Outlook and Discussion

Results

- There is considerable regional variation in terms of segregation
- National trends towards **declining segregation** in care labour are mirrored on a regional level:
 - Classes of high-segregation commuting zones form the majority in 1980
 - However, these classes are not very persistent. Few remnants are left in 2020.

Discussion

- LPA: choice of indicator variables
 - Role of racial-ethnic composition
 - Adding *flow variable* like change in segregation measures
 - Adding additional socio-economic variables
- LPA: explaining transitions
 - Group-based trajectory modeling (GBTM) – see Nagin 2014 and Kemeny & Storper 2022

Discussion

- Paying closer attention to concrete regions of particular interest
 - Loose case-studies on city-regions like New York, San Francisco, Detroit, etc.
 - Broader focus on the situation in **'left behind' places** versus **superstar regions** (Rodríguez-Pose 2018; Feldman et al, 2021; Kemeny & Storper 2022, MacKinnon et al. 2022)