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# UNEQUAL PATHWAYS ?

## SPECIALIZATION CHOICES IN THE REFORMED FRENCH HIGH SCHOOL SYSTEM

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### 1 CONTEXT: REFORMING THE FRENCH HIGH SCHOOL

In FRANCE, high school students choose between three tracks:

- ◇ General (academic, for university)
- ◇ Technological (shorter, specialized)
- ◇ Vocational (job-oriented)

Before 2018, students in the **general track followed fixed subject streams** (Literary, Economic & Social, or Scientific).

The 2018 reform replaced these with **individual subject combinations: students pick 3 Specialization choices in 11th grade, then keep 2 in 12th grade.**

Specialization choices determine **the final diploma and shape access to higher education**, through a national platform where universities select students based on **academic profiles**.

The reform encourage flexibility and student autonomy—but it also creates early high-stakes decisions in a context of **unclear selection criteria from higher education institutions**.

### 2 RESEARCH QUESTION

HOW DO GENDER AND SOCIAL CLASS SHAPE STUDENTS' SPECIALTY CHOICES — AND WHAT SOCIAL LOGICS EXPLAIN THESE DECISIONS?

### 3 METHODOLOGY: MIXED & LONGITUDINAL APPROACH

#### Quantitative data

- ◇ National dataset ( Parcoursupall 12th grade general track students, 2023)
- ◇ Analysis of **subject combinations** (11th grade (triplets) and 12th grade (pairs))

#### Qualitative data

- ◇ Fieldwork in 3 high schools (urban, suburban, rural)
- ◇ **Longitudinal follow-up of 30 students** (10th grade → post-secondary)
- ◇ Annual interviews with students & parents

### 4 INNOVATIONS

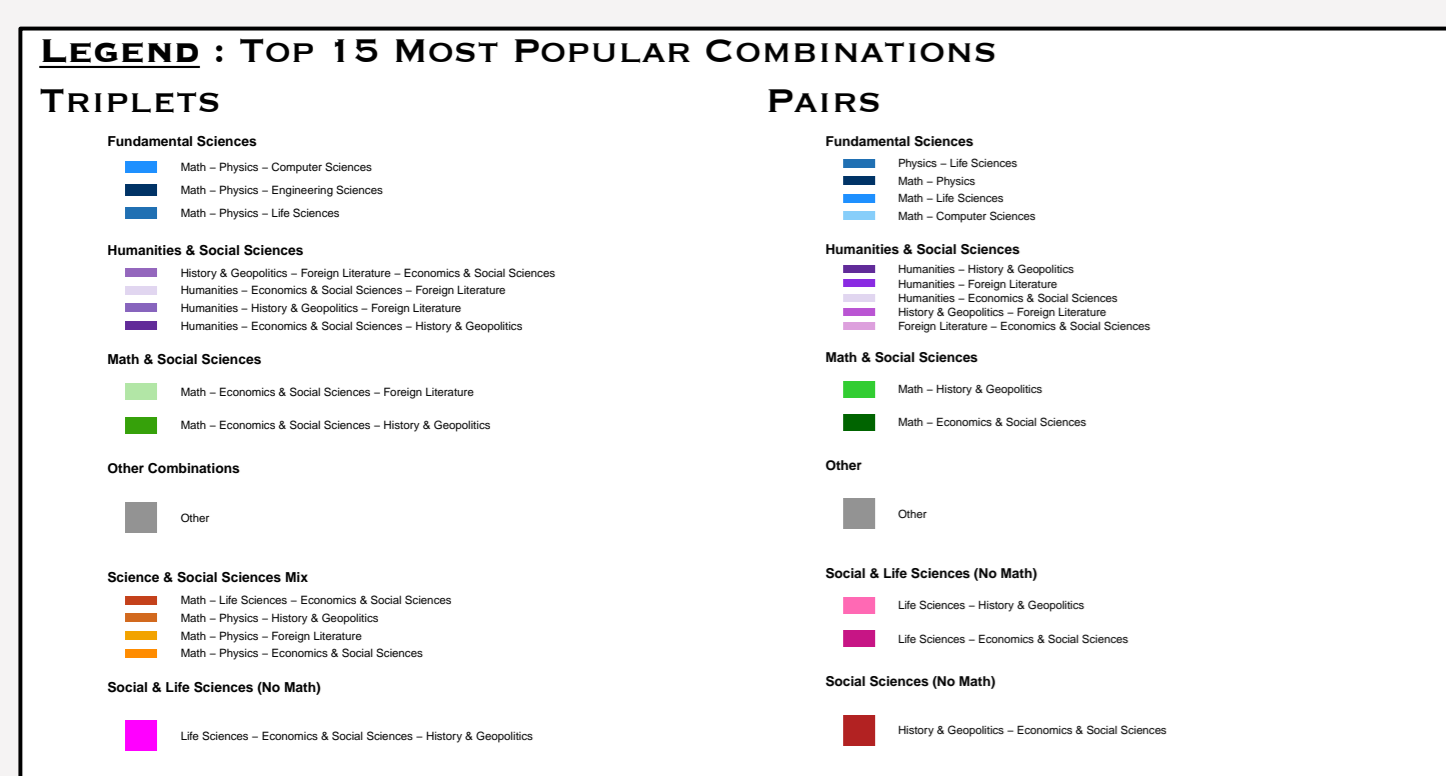
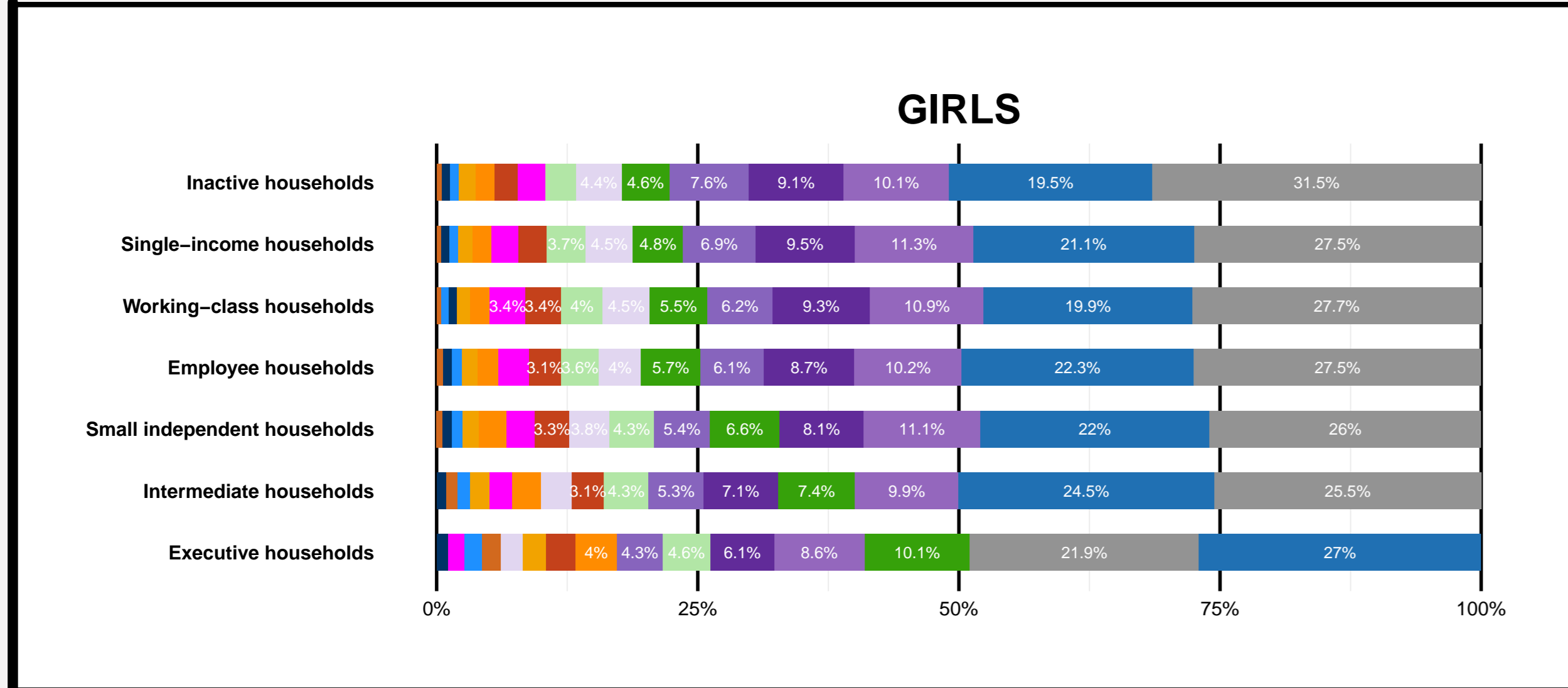
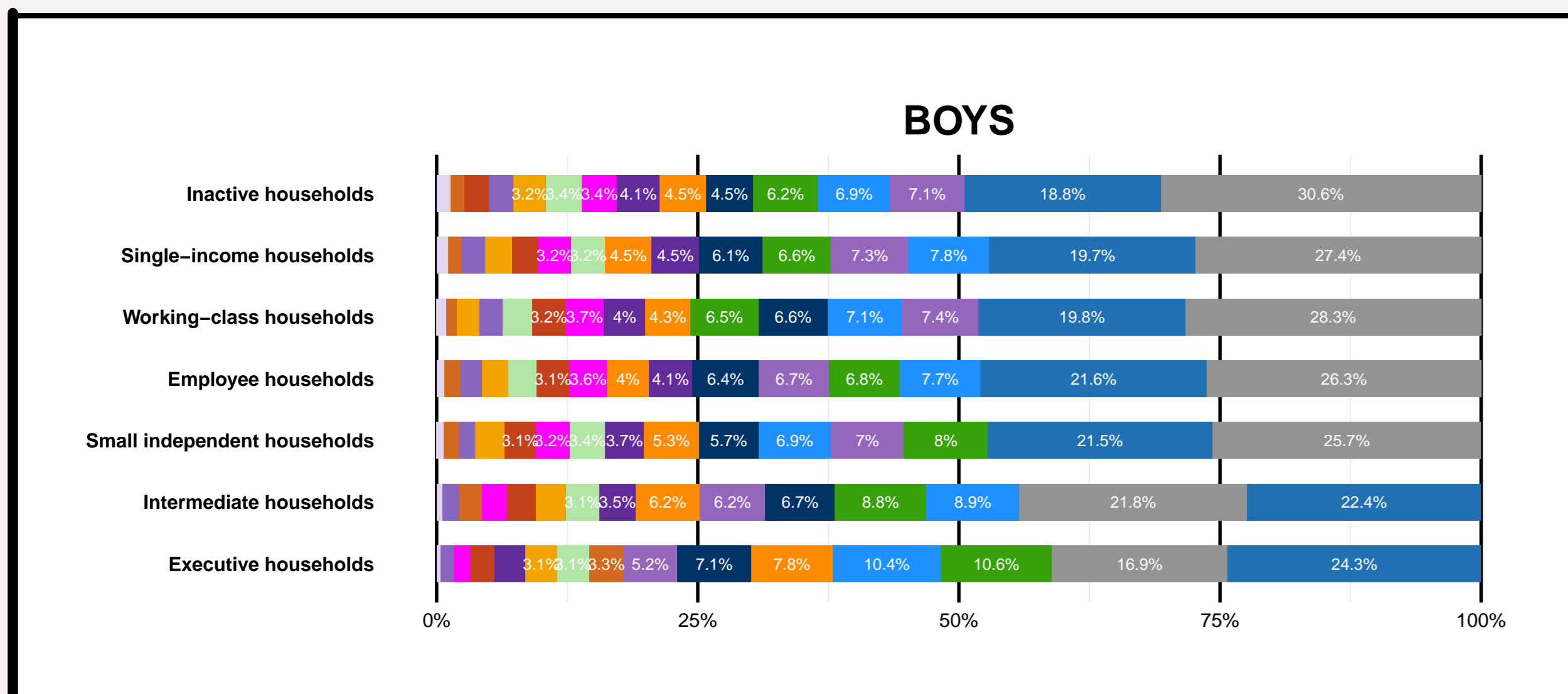
Longitudinal and ethnographic study : Follows students over time to show how gender and class shape choices —and **reproduce long-term inequalities**

Intersectional approach : Goes beyond gender to include social background and academic performance

Refined social classification : Applies a 7-category **Household Occupational Classification** , based on both parents' occupations, to better capture students' social environments.

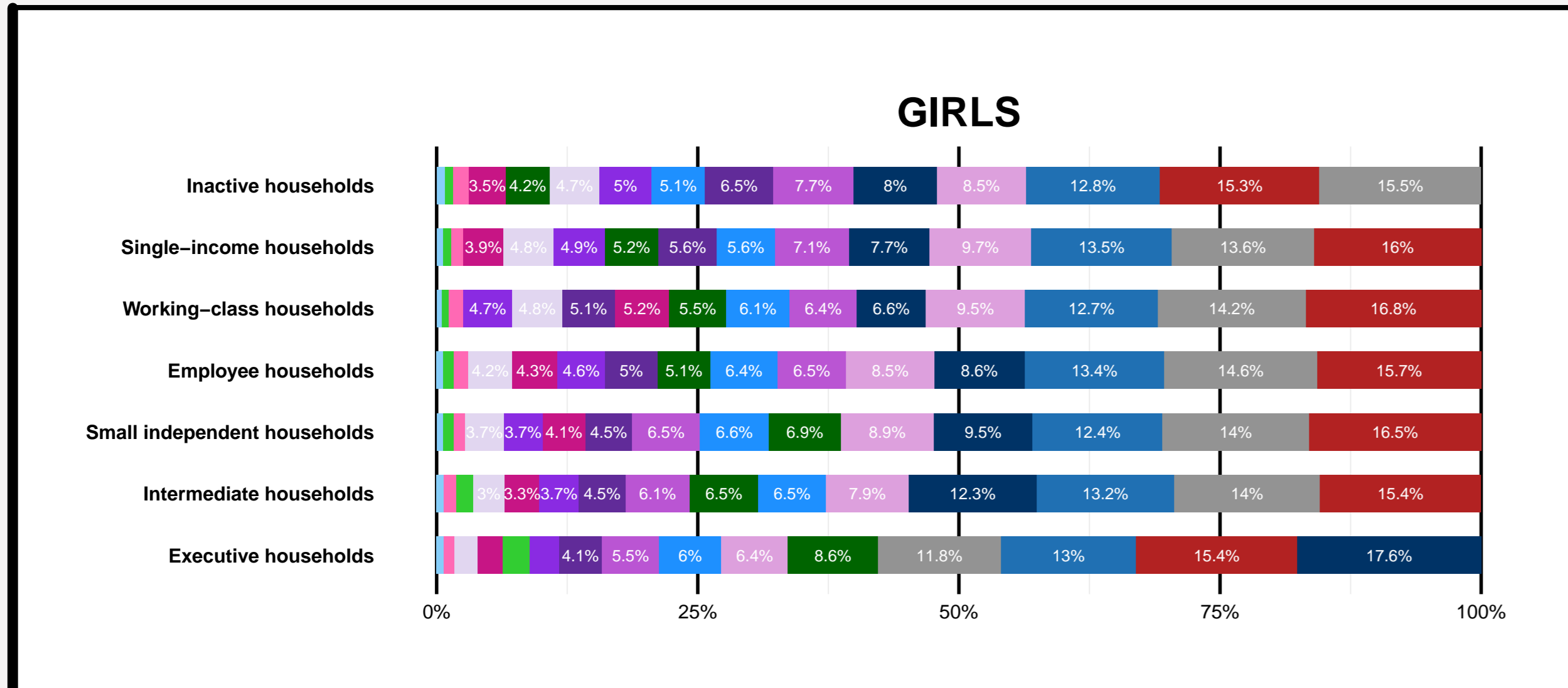
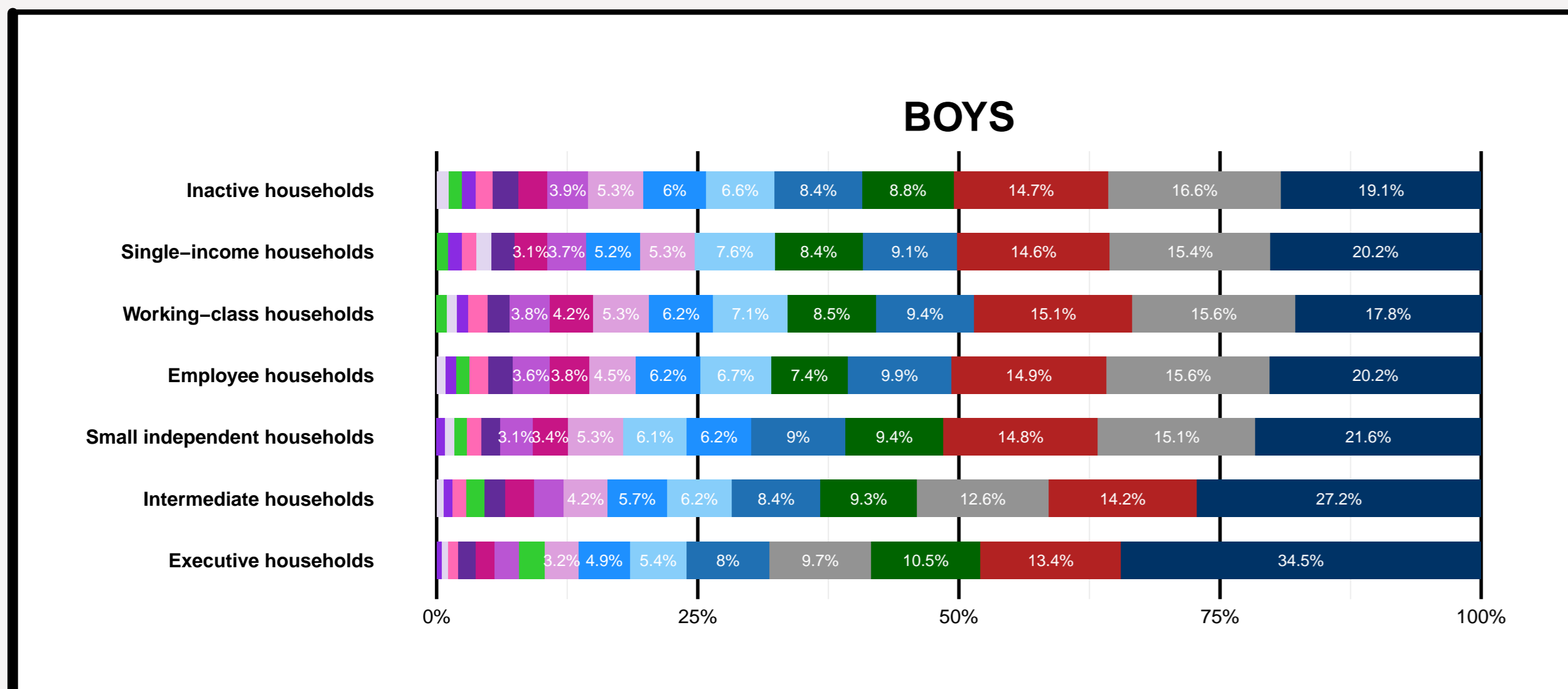
### 5 RESULTS DISTRIBUTION OF SPECIALIZATION CHOICES BY SOCIAL CLASS AND GENDER

#### 11TH GRADE: "TRIPLETS"



**NOTE:**  
Percentage under 3 % are hidden for clarity  
The table shows the 14 most common triplet and pair combinations. Other combinations are grouped under 'Other'.  
These triplets account for 76.3% of 11th grade students (the remaining 23.7% chose other combinations).  
The 14 pairs cover 86.5% of 12th grade students (13.5% chose other combinations).  
Household social class categories are based on both parents' occupations (see Cayouette-Rembrière & Amosé Economics and Statistics 2022).

#### 12TH GRADE: "PAIRS"



### 6 WHO CHOOSES WHAT?

#### 11TH GRADE: "TRIPLETS"

##### Socially Differentiated Combinations

Students from **working-class backgrounds tend to move away from dominant triplets** (Math–Physics–Life Sciences / Economics–Geopolitics–Math), choosing instead more **diverse and less standardized combinations** ("other" triplets).

At equal social background, girls and boys choose "other" triplets at similar rates—**except in upper classes**, where girls are more likely to opt for diverse combinations.

##### Math as a Social and Gender Marker

Girls are **less likely to choose math-including triplets—except in upper classes**.

Regardless of gender, the presence of **math decreases with lower social background**.

Math–Physics–Life Sciences, heir to the former "elite" 'Scientific' track, remains the **most chosen combination** but is **declining among working-class students**.

##### Gendered Choices Intersect with Social Class

◇ **Working-class girls:** Humanities, Foreign Languages, Social Sciences

◇ **Upper-class girls:** Scientific triplets (Math–Physics–Life Sciences) or balanced ones ( Math – Eco/Sc Sociales – Hist/Geopolitics)

◇ **Upper-class boys:** Often combine Math with Sciences or Social Sciences

◇ **Working-class boys:** More likely to choose Humanities and Social Sciences Triplet

#### 12TH GRADE: "PAIRS"

##### Gendered and Class-Based Patterns

◇ **Math–Physics** → **Strongly male-dominated** and favored by **upper-class students** (including some upper-class girls).

◇ **Physics–Life Sciences** → More **popular among girls** and rarely chosen by boys, as it is the disciplinary path most aligned with access to **medical studies**.

◇ **Math–Social Sciences** → Common among upper-class students of both genders.

◇ **Math–CS / Math–Life Sciences** → More frequent among working-class boys.

### 7 UNDERSTANDING THE SOCIAL LOGICS BEHIND THE CHOICES

#### The Role of the School System

**Naturalization of Preferences** : Teachers guide students to choose specialties based on their "career plans", **without questioning the social or gendered roots of these preferences**.

**Academic Filtering** : Low-scoring students are **steered away** from the subjects they perform poorly in (especially Math and Physics) and pushed toward areas where they "**perform better**"—even if this **narrows their post-secondary options**.

#### Working-Class Students Strategies and Constraints

Their choices are often shaped by a **logic of "playing it safe"**: selecting subjects where they **score best**, rather than based on clear post-secondary plans (**Short-term strategy**)

→ Explains their **higher presence in "other"** combinations and **underrepresentation in historically dominant, high-status tracks**

→ They also have **less knowledge** about expectations in higher education

#### HUGO

(SINGLE-INCOME HOUSEHOLDS, RURAL AREA):

"AT FIRST, I PICKED MATH-PHYSICS-LIFE SCIENCES BECAUSE I DIDN'T KNOW WHAT TO CHOOSE AND OTHERS WERE TAKING THAT. BUT BY OCTOBER, IT WAS A DISASTER IN MATH AND PHYSICS—I DIDN'T UNDERSTAND ANYTHING. SO I SWITCHED MATH FOR ECONOMICS AND SOCIAL SCIENCES WITH PHYSICS AND LIFE SCIENCES."

#### Preferences and marks That Divide, Choices That Rank

◇ **Upper-class boys** → Choose Math–Physics, aligned with **engineering goals** or as a **strategy for keeping all doors open** in higher education (**Medium and long term strategy**).

◇ **Working-class boys** → Often choose Math–Computer Sciences, by default, due to **lack of guidance** or **low grades in Physics**.

◇ **Working-class girls** → Often drawn to Humanities, Social Sciences and Foreign Languages with a "**care**" or **service-sector orientation** (tourism, law, teaching, psychology...) and low grades in math (**Long-term strategy**).

◇ **Upper-class girls** → Math–Eco/Soc Sciences for academic and social reproduction (via Math, a dominant subject) and diversification of higher education options (business schools, law, journalism...). Some choose Math–Physics to **distance themselves from feminine-coded fields**, driven by engineering ambitions or family academic expectations.

### 8 CONCLUSION – THE ILLUSION OF CHOICE

In a **competitive education system**, specialization choices act as a **sorting mechanism for access to higher education and the job market**.

By emphasizing individual "**tastes**" and "**aspirations**", the French high school reform **hides social and gender inequalities** — and obscures how **differentiated socialization** by class and gender shapes students' choices.

**Students are made responsible** for unequal pathway and outcomes in a system that promotes autonomy without equity.

**NEXT STEPS:** Cross-analyze Gender & Class with Geographical location, academic performance, and ethnicity (a statistically complex task in France, made possible through qualitative research).