# How to read scientific articles efficiently

**Adapted for Economics from material created by the A!Ole project**

**A"**
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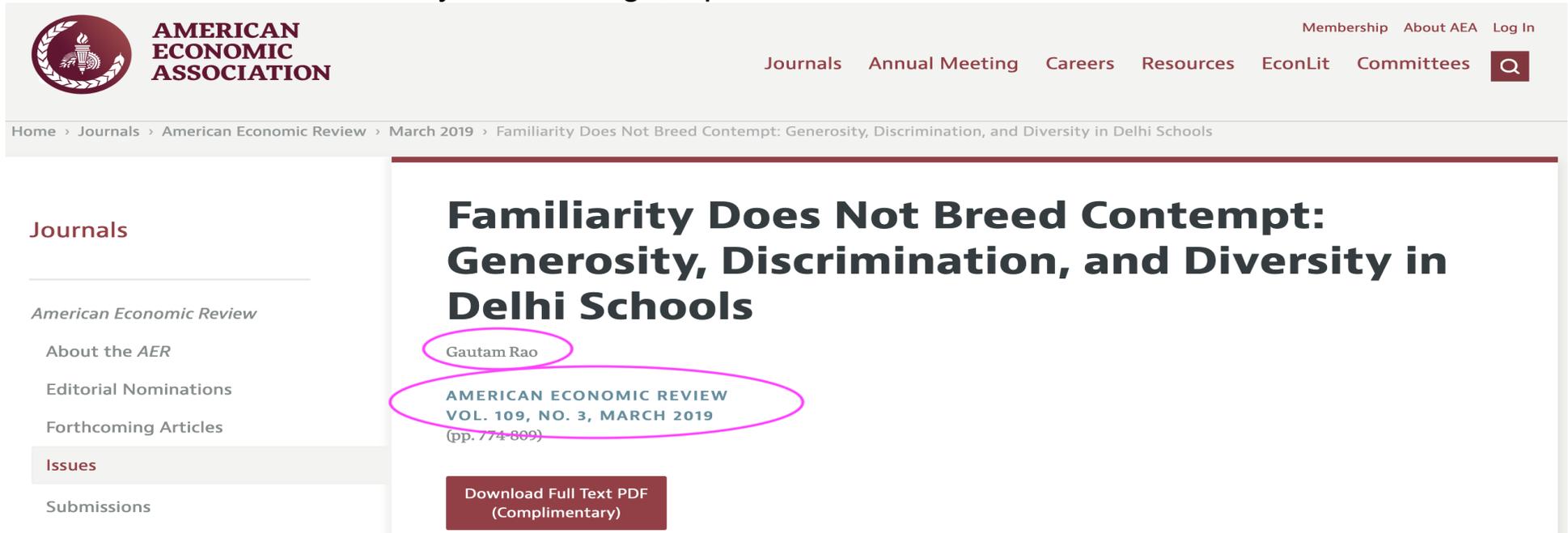**Updated in Sept. 2022**

# After this presentation you would be able to:

(1) Develop your own style of reading

(2) Get a better understanding of what is important and relevant to you in the article

(3) Decide which articles require a thorough read and which ones would only need to be skimmed through

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# Before you start reading…

- Find the journal's name

- Look at the date of the publication

- Check who are the authors (and their affiliations)

- Take a look at the title and any subheadings, if provided

# Skim Reading: Abstract and Keywords

**Pay attention to the key concepts listed in the abstract!**

What is the main topic of the article? What is the method? What are main findings?

## Familiarity Does Not Breed Contempt: Generosity, Discrimination, and Diversity in Delhi Schools[†]

By Gautam Rao*

*I exploit a natural experiment in Indian schools to study how being integrated with poor students affects the social behaviors and academic outcomes of rich students. Using administrative data, lab and field experiments to measure outcomes, I find that having poor classmates makes rich students (i) more prosocial, generous, and egalitarian; and (ii) less likely to discriminate against poor students, and more willing to socialize with them. These effects are driven by personal interactions between rich and poor students. In contrast, I find mixed but overall modest impacts on rich students' academic achievement. (JEL C90, D31, I21, I24, O15, Z13)*

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# Skim Reading: Introduction

(1) Grasp the general phenomena and relate it to a larger context

(2) Try to understand why is the topic interesting enough to be written and read about

(3) What did the author do in the paper? What is the contribution?

Schools are de facto segregated across social and economic lines in many countries. Much research has examined the effects of such segregation on learning outcomes.[1] But desegregation and affirmative action efforts have historically been motivated not only by equity concerns, but also by the argument that diversity in schools benefits society by positively influencing intergroup attitudes and social behavior (Schofield 1991). Yet, empirical evidence on such effects is exceedingly scarce. More generally, little is known about how social preferences and behaviors are shaped, and whether they can be influenced by policy.

I focus on a particular dimension of diversity (economic status) and seek to answer the following question: what effects do peers from poor households have

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# Skim Reading: Conclusion

(1) Identify main findings listed by the author

(2) Grasp conclusions drawn from the findings

## VI. Conclusion

In this paper, I exploit a natural experiment in education policy in India to estimate how greater economic diversity in classrooms affects wealthy students. I assemble a variety of evidence from field and lab experiments, administrative data, and tests of learning to reach three main findings. The first finding is that having poor classmates makes wealthy students more prosocial and concerned about equality, and thus more generous toward others. The second finding is that wealthy students become more willing to socially interact with poor children outside school, and thus exhibit less discrimination against the poor. The third finding is of mixed but overall modest impacts on academic outcomes, with negative effects on English language learning but no effect on Hindi or math. Thus, my overall conclusion is that increased diversity in the classroom led to large and arguably positive impacts on social behaviors, at the cost of negative but modest impacts on academic outcomes.

One implication of these findings is that

# Skim Reading: Middle Part

(1) Look at the headings of the sections

(2) Does the paper have a theoretical model or conceptual framework? Find hypotheses or propositions herein.

(3) Try to answer for yourself whether the article is empirical or theoretical and whether it has a qualitative or quantitative research approach (P.S. qualitative methods are rare in Economics, but articles from other fields with a qualitative approach may be relevant reading for some economics theses.)

(4) Look out for definitions of the key concepts

(5) Pay attention to the titles of result figures and tables

# Going deeper?

- After these steps, you will have a better idea of whether this paper is central for your thesis, or if the paper is irrelevant or more marginal to your focus in the thesis.

- If the paper is not closely related to your focus or interest, or does not seem to have made any real contribution, you may want to keep a short summary on it (based on the points listed on the previous 4 slides) and then move on to other papers.

- If you think that the paper is close to your interest in the thesis, and has made a contribution, you need to read it through more thoroughly, which we discuss in the next steps.

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# Detailed Reading: Introduction and Research Contributions

(1) Try to understand the study context

(2) Look for the research question(s)

(3) Pay attention to the contributions that the study makes

# Detailed Reading: Literature Review

This section is often part of the Introduction in Econ papers. It typically includes:

- Key terms and concepts

- Overview on other studies published in the field that touch upon related issues

- Research gap

This paper relates to four bodies of work in economics. First, an active recent literature studies whether interaction reduces intergroup prejudice. Most closely related are Boisjoly et al. (2006); Burns, Corno, and La Ferrara (2016); Carrell, Hoekstra, and West (2018); and Finseraas and Kotsadam (2017), who find that being randomly assigned a roommate of a different race at college or at a military academy reduces interracial prejudice in later years.[6] Second, this paper relates to research on the effects of desegregation and (more generally) peer effects in education. Evidence on peer effects in learning is mixed, with impacts on non-academic outcomes such as church attendance and drug and alcohol use a more robust finding (see Sacerdote 2011 for a review). Consistent with this, I find substantial effects on prosocial behavior and discrimination, but mixed and overall modest effects on test scores. A third connection is to the small literature on how social preferences and prosocial behavior are shaped, for example by exposure to violent conflict .......

# Detailed Reading: Final Parts

- Summary of the main findings

- Contributions of the study

- Study limitations

- Avenues for future research

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# After Reading: Reflection Questions

(1) Is the main argument of the article logical?

(2) Do you agree or disagree with the authors' view?

(3) Do you find the information that the authors use to support their claim suitable?

(4) Do you find the methodological approach that the authors took appropriate?

(5) What are the most important findings of the article?

(6) To whom are they important, for example academic researchers, business managers, public sector decision-makers, and why?

(7) What are the mechanisms behind the findings (if this is discussed)?

(8) What is the external validity of the study?

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# After Reading: QAQC Analysis

**Quote** - locate the quote in the article which summarizes the main argument of the study in the author(s)' own words.

**Argument** - summarize the main argument of the article in your own words.

**Question** - formulate the question related to the article.

**Connection** - identify how the given article is connected to your own research idea. *OR*

**Case** - come up with a real-life example of how the article's main argument can be used or was used already.

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# After Reading: Explore Citations

In Google scholar you can see how many, and what papers have cited the paper you just read. You can click on "Cited by.." to explore those papers and also use search terms to narrow your search among this list of papers:

## Familiarity does not breed contempt: Generosity, discrimination, and diversity in Delhi schools

G Rao - American Economic Review, 2019 - aeaweb.org

… Thus, the policy **does not** necessarily generate a substantial increase in caste **diversity** in the **schools** I study. Second, caste **does not** actually appear to be a salient social category …

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