Elite U.S. Universities and Why Germany Does Not Need Them

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Framing: Two Questions

- What actually are US Elite universities and what role do they play in higher education and US society?

- Why does Germany think it needs universities like these and what might be their potential impact on German higher education and society?

Introduction and Background: Why this Topic

- Higher education is a vehicle of social mobility enlarging both individual life chances and broader social & economic outcomes
- My own research background on making postsecondary education accessible and successful for underrepresented students from discriminated and uneducated groups in US:
- My growing concern about the gradual closing of paths to and through doctoral education in the US which is increasingly enabling replication and reinforcement of academic elites
- Research and observation of Germany since 1970s, a life long effort to understand German society

Broader Background

- Huge world wide changes in higher education organization from the 1990s involving restructuring of national systems and emphasizing and formalizing competition among them through international rankings, new degrees, programs, institutions—new conceptions of the university
- United States HE system not really a part of these changes—already was highly ranked, diverse, flexible and continues in own path
- Paradox: US seen as the system to emulate particularly its “elite” research universities—other side: limited understanding of what exactly involved or how they got that way.

Purpose of this Paper to Elaborate on this (Mis-)Perception by:

- Presenting an overview of US higher education—and where elite institutions are situated within it and their historic development
- Illuminate what “elite” means in the US and how this label was acquired
- The specific contribution of elite institutions to multiple forms of stratification focusing on doctoral students
- Investigate the German perception of US elite universities
- Suggest some of the fundamental structural, cultural, functional differences between the two systems of higher education,
- Raise the question that perhaps the pursuit of US style research universities has more to do with rhetoric and larger international pressures

What I would eventually like to do to follow theme:

- Consider the evolution of the German university system especially since the 1990s and its absorption of new organizational forms
- Expand on the issue of the level of state control within Germany and the tension between faculty within universities and decisions made external to them affecting how universities operate
- Examine the Excellence Initiative and its institutional consequences
- Raise questions about the origins of the German pursuit of excellence and elite universities 1. possible under the current framework? 2. useful for sustaining German educational goals and social democracy?
- Particularly raise questions about the cultural relationship between university policies and innovations and issues in larger German society

Purpose of Presentation—To foster Inquiry

- Raise a set of considerations about how history in Germany may be shadowing the present and possibly supporting an incomplete and negative perception of Germany's past affecting current university policy and the valuing of its universities
- Inquire about social class and German elites and whether the post-War consensus is being worn away which supported equality of institutions and equal opportunity

Organization of Presentation

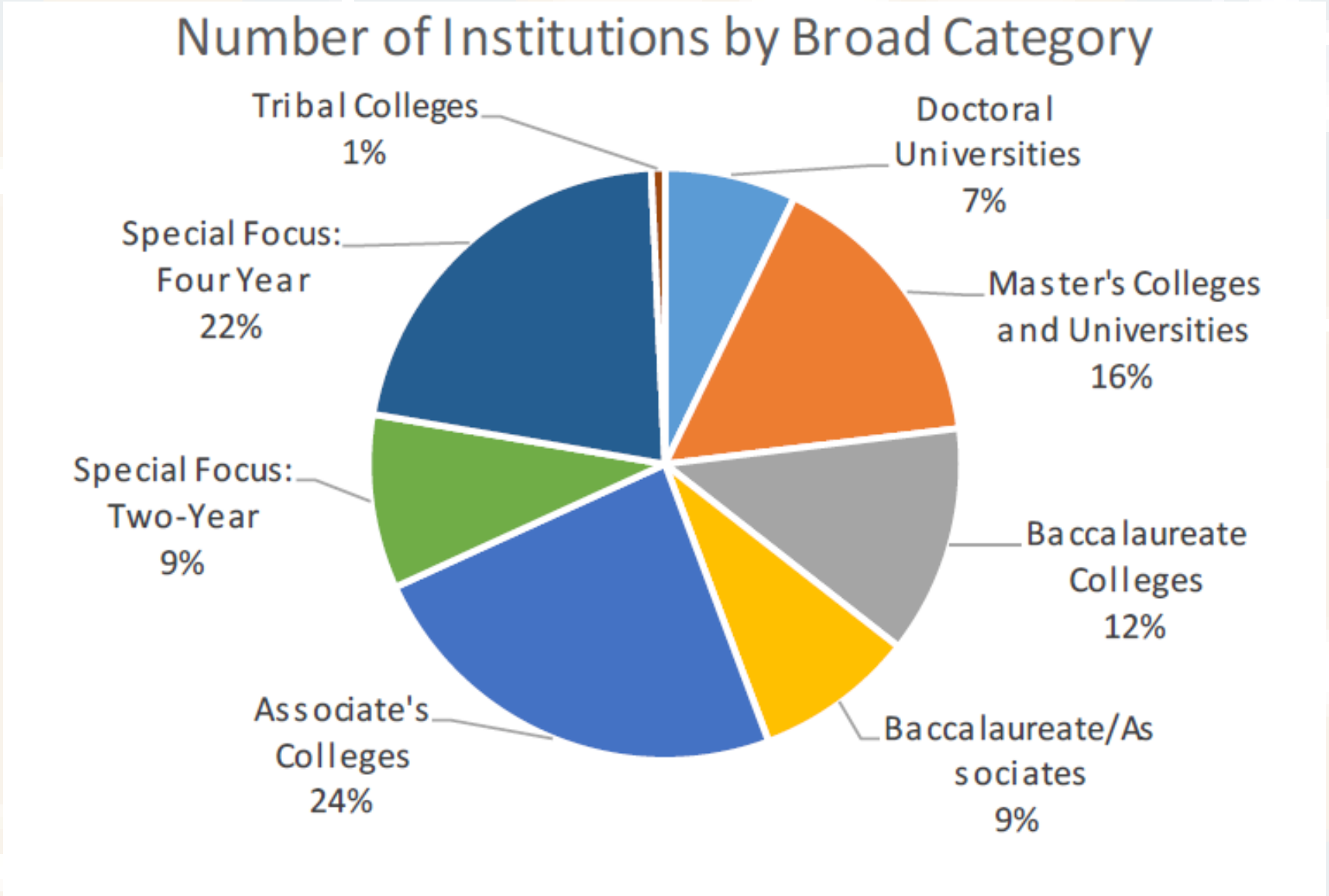
- Short description of world wide trends affecting research universities, international ranking systems, perceived competition, recasting role of universities as engines of economic growth and as part of local economies as knowledge and technology experts, universities as business, internationalism itself
- Description of US Higher Ed landscape—role of elite universities and faculty reproduction through doctoral education

World wide trends in higher education

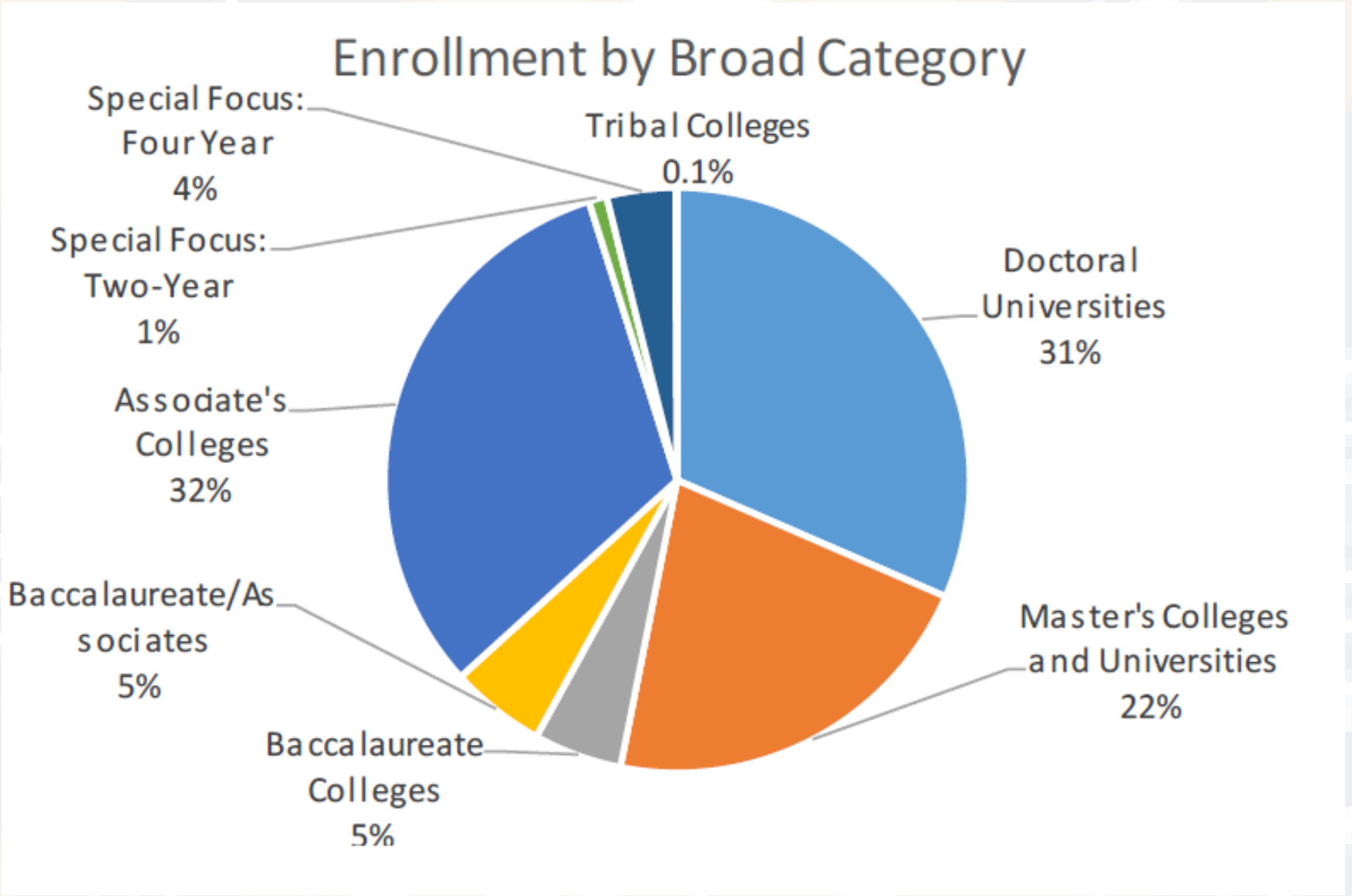
- Rise of various ranking schemes from Times, Shanghai, and others; measuring different things but focused on output and numbers
- Importance of academic pedigree for new doctorates related to their supervising faculty's academic prowess, departmental and institutional ranking, students' own publications and "prestige" of all of these
- Significance of peer reviewed publications, times cited, impact indexes, domination of English language journals
- Increasingly dominating significance of amount of money won by faculty from external sources

The US Multifaceted Higher Education System 2016-17 in Numbers

- 3,895 Total of all types of degree granting institutions with first year undergraduates (NCES 2018, Condition of Education)
- 2,395 4-year institutions granting bachelor's or higher degree level
- 1,500 2-year institutions offering associate's degrees and other certificates. (NCES, 2018) Academic transfer <15% of total enrollment
- Control: Public, Private-non profit, private for profit
- Size: under 200 to 65,632 at Texas A&M U, College Station (CHE Almanac 2018)
- Serving every constituency: 18-24 most common, but . . .



http://carnegieclassifications.iu.edu/downloads/CCIHE2015-FactsFigures.pdf



http://carnegieclassifications.iu.edu/downloads/CCIHE2015-FactsFigures.pdf

Classification of Doctoral Universities according to the Carnegie System: 2015

- Basic definition according to number of research Ph.D.s (more than 20) in number of fields
- R1: Highest research activity 115 enroll 3,323,616 16.2%
- R2: Higher research activity 107 enroll 1,691,059 8.3%
- R3: Moderate research activity 113 enroll 1,455,316 7.1%

Note: Terms research intensive and extensive are no longer used

Implications

- Public Doctoral institutions enroll a major portion of undergraduates: 1. while not all elite, they are highly selective. 2. Undergraduates attending RU s more likely to go to graduate school
- Private doctoral Institutions, “elite” operate similarly but enroll a much small number of undergraduates, even more of whom go on
- Graduate student selection for doctoral programs at top ranked and elite institutions has been shown to favor those from similar backgrounds as faculty (Posselt 2017)
- 69% of research doctorate recipients 2016 from educated, highly educated families (SED 2018)

Table 34. Highest educational attainment of either parent of doctorate recipients: Selected years, 1986–2016 (Percent)

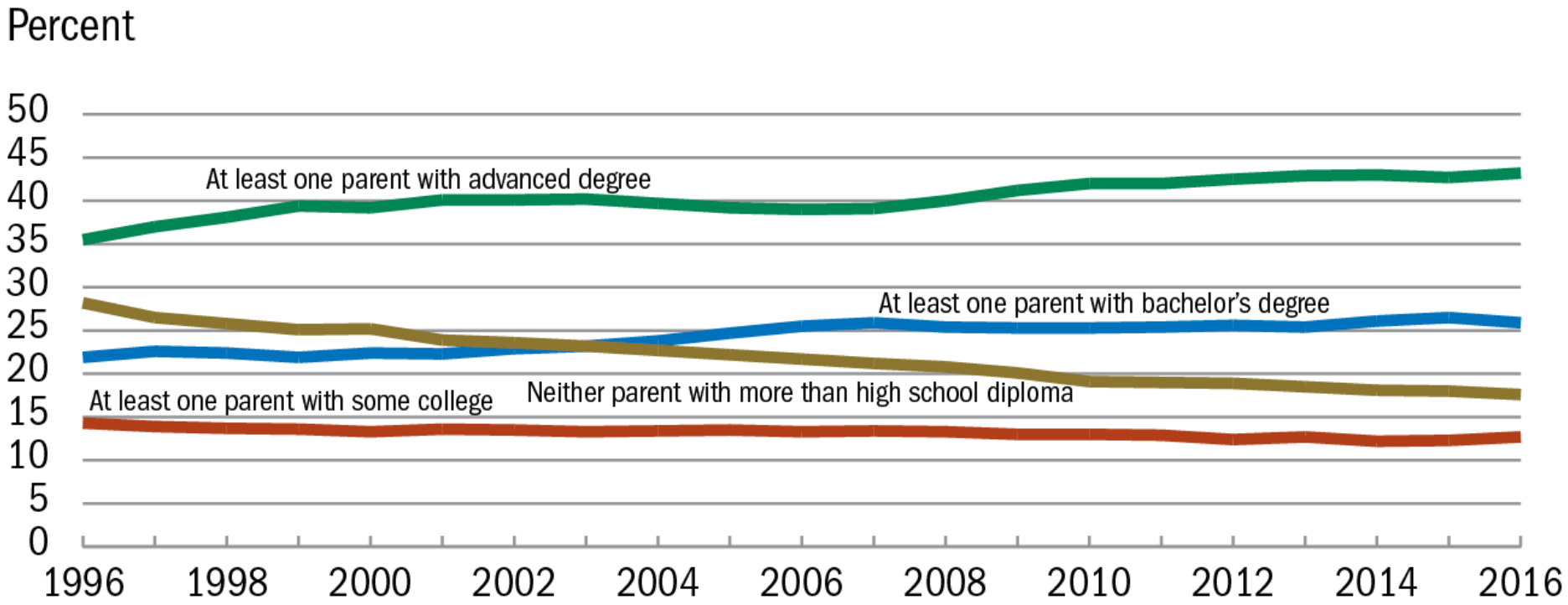
Year	Parental education attainment (%)			
	High school or less	Some college[a]	Bachelor's degree	Advanced degree
1986	37.1	14.6	22.6	25.7
1991	32.5	15.3	20.3	31.9
1996	28.2	14.3	21.9	35.5
2001	23.9	13.6	22.3	40.1
2006	21.7	13.3	25.5	39.0
2011	19.0	12.9	25.4	42.0
2016	17.6	12.7	25.9	43.2

[a] Includes those who attended college but did not earn a bachelor's.

NOTE: Percentages may not sum to 100 because of rounding and because 199 doctorate recipients (0.05%) reported "not applicable/unknown" for both father's and mother's education in 2006, 283 doctorate recipients (0.07%) reported "not applicable/unknown" for both father's and mother's education in 2011, and 274 doctorate recipients (0.06%) reported "not applicable/unknown" for both father's and mother's education in 2016.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates.

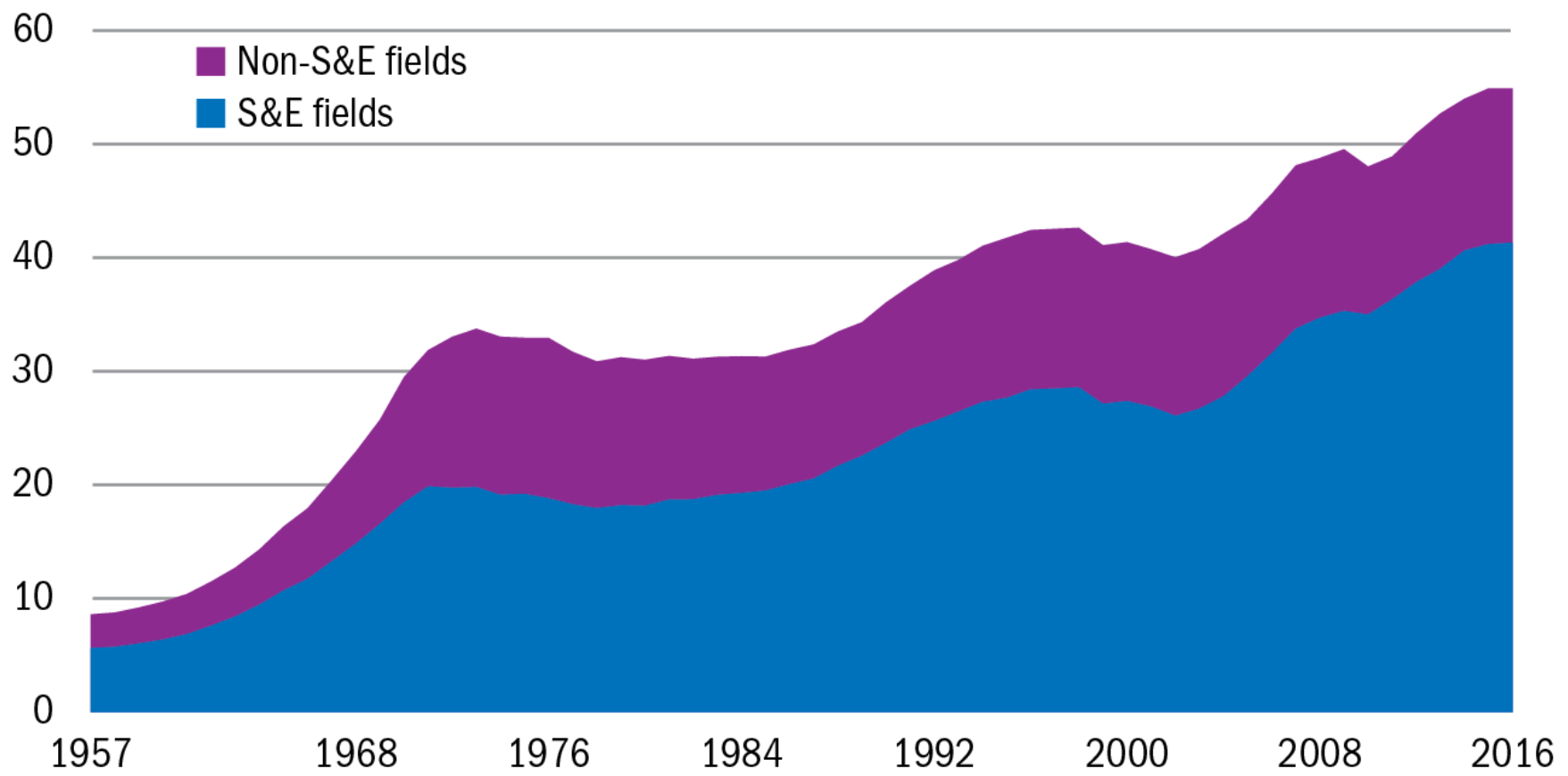
Doctorates awarded, by highest parental educational attainment: 1996–2016



NOTES: Percentages are based on the number of doctorate recipients responding to the item on the highest education attainment for either parent. Percentages may not sum to 100% because of rounding and because of doctorate recipients who reported "not applicable" for both father's and mother's education beginning in 2004.

SOURCE: *Doctorate Recipients from U.S. Universities 2016*. Related detailed data: tables 33, 34.

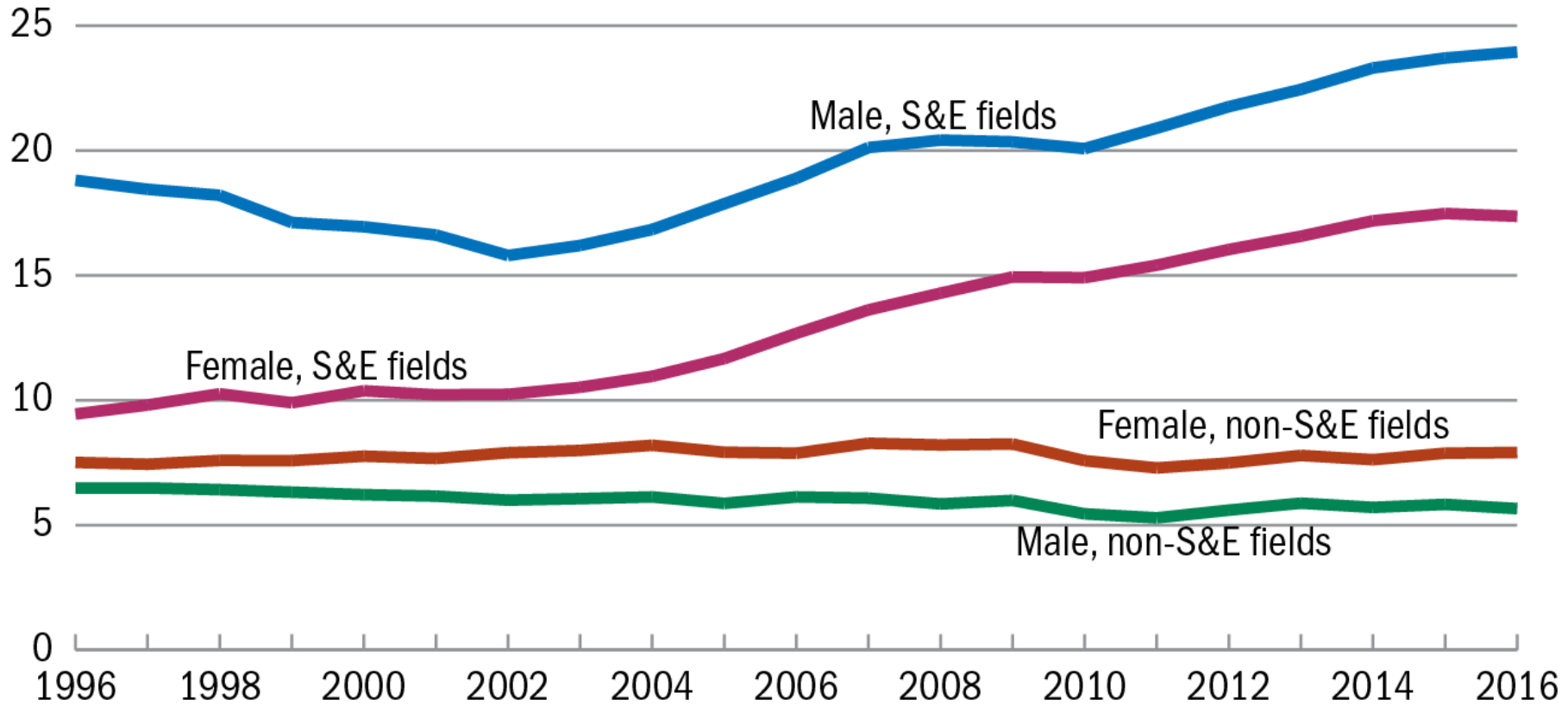
Doctorates awarded by U.S. colleges and universities: 1957–2016



S&E = science and engineering.

SOURCE: *Doctorate Recipients from U.S. Universities 2016.* Related detailed data: table 1.

Sex and field of study of U.S. doctorate recipients: 1996–2016

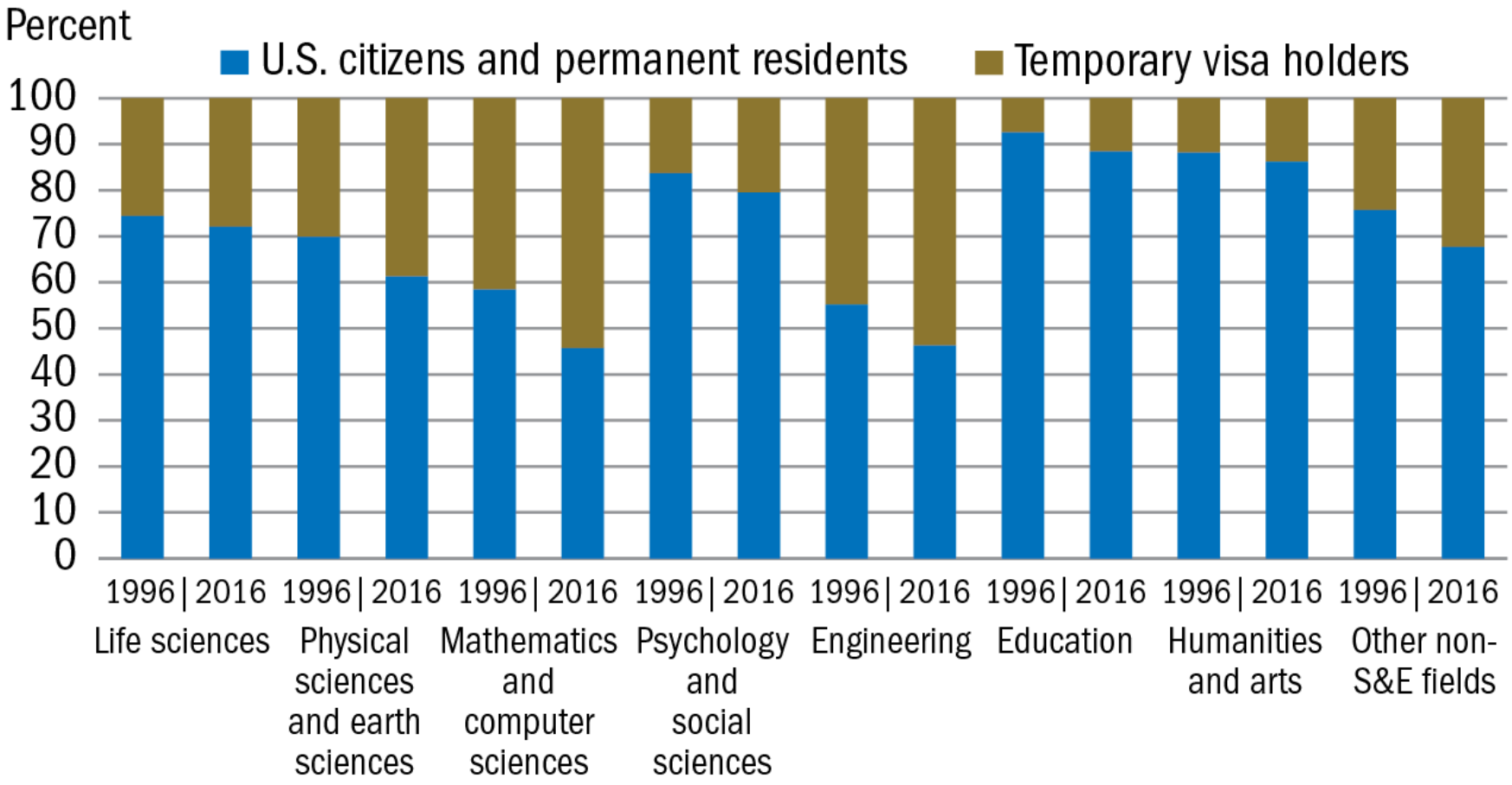


S&E = science and engineering.

NOTE: Excludes respondents who did not report sex.

SOURCE: *Doctorate Recipients from U.S. Universities 2016*. Related detailed data: tables 14, 15, 16.

Doctorates awarded, by citizenship and broad field of study: 1996 and 2016



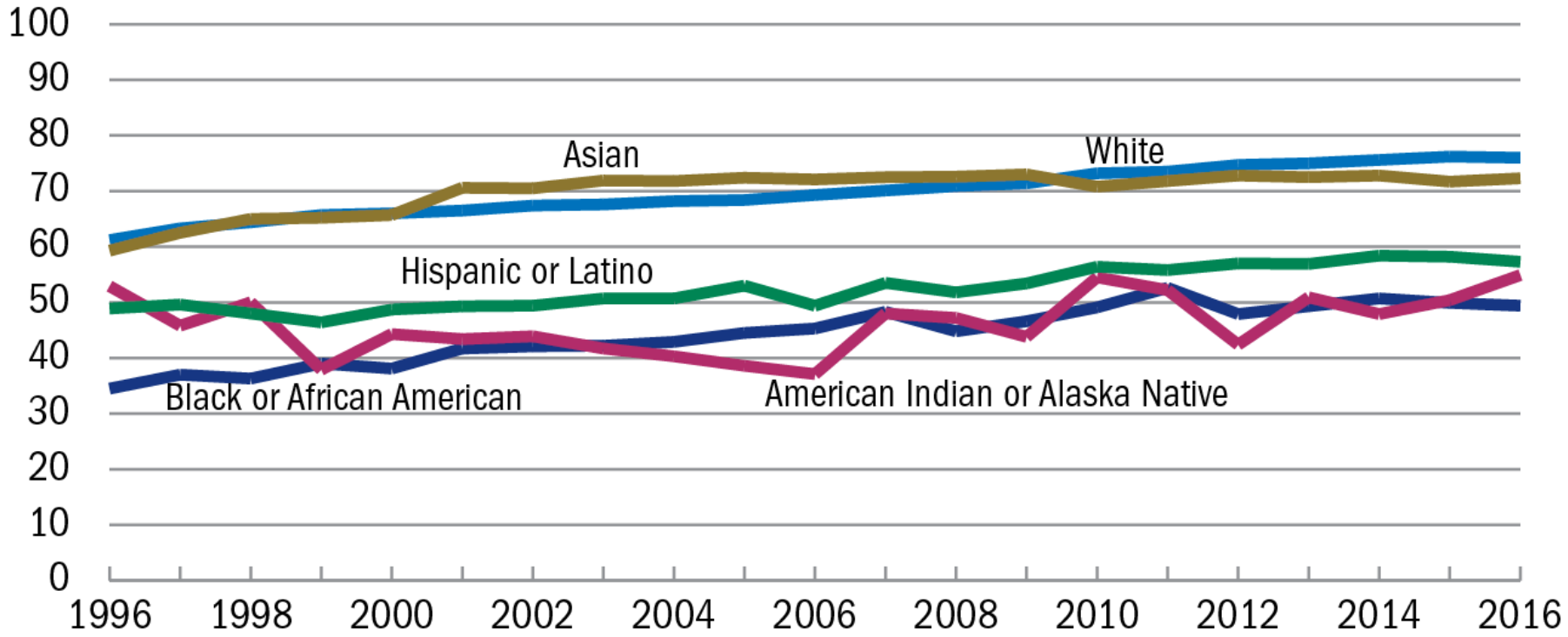
S&E = science and engineering.

NOTE: Percentages are based on the number of doctorate recipients for whom citizenship was reported.

SOURCE: *Doctorate Recipients from U.S. Universities 2016*. Related detailed data: table 17.

Parental educational attainment of U.S. citizen or permanent resident doctorate recipients, by ethnicity and race: 1996–2016

Percent having at least one parent with a bachelor's degree or higher



NOTE: Percentages are based on the number of doctorate recipients who are U.S. citizens or permanent residents.

SOURCE: *Doctorate Recipients from U.S. Universities 2016*. Related detailed data: tables 33, 34.

Table showing discrepancies between percentages of groups earning Ph.Ds in relation to their percentage in the population

A. 2015 Ph.D.s Awarded to US Citizens and Permanent Residents

	Total	Am Indian	Asian	Black	Hispanic	White	Other*
No.	35,117	130	3,072	2,281	2,451	25,407	1,776
%	100%	0.37%	8.7%	6.5%	7.8%	72.4%	5.1%

B. US Population by Ethnicity by Percentage 2015

	100%	1.2%	5.4%	13.2%	17.4%	62.1%	2.5%

C. Percentage who were first generation (data for ca 2,500 fewer than all degree recipients)

	23%	41%	26.3.%	40%	37.1%	19.7%	23.3%

Source lines A. & C: National Science Foundation (2017) Survey of Earned Doctorates 2015, Table 19,Table 33.
www.nsf.gove/statistics/2017/nsf17306/data/tab9.pdf and tab33.pdf

Source line B: US Census. Www.census.gov/quickfacts/table/RH1125214/00

*Other: People of mixed race, unidentified race

Discrepancies Made Possible Through the Operation of Prestige Networks:

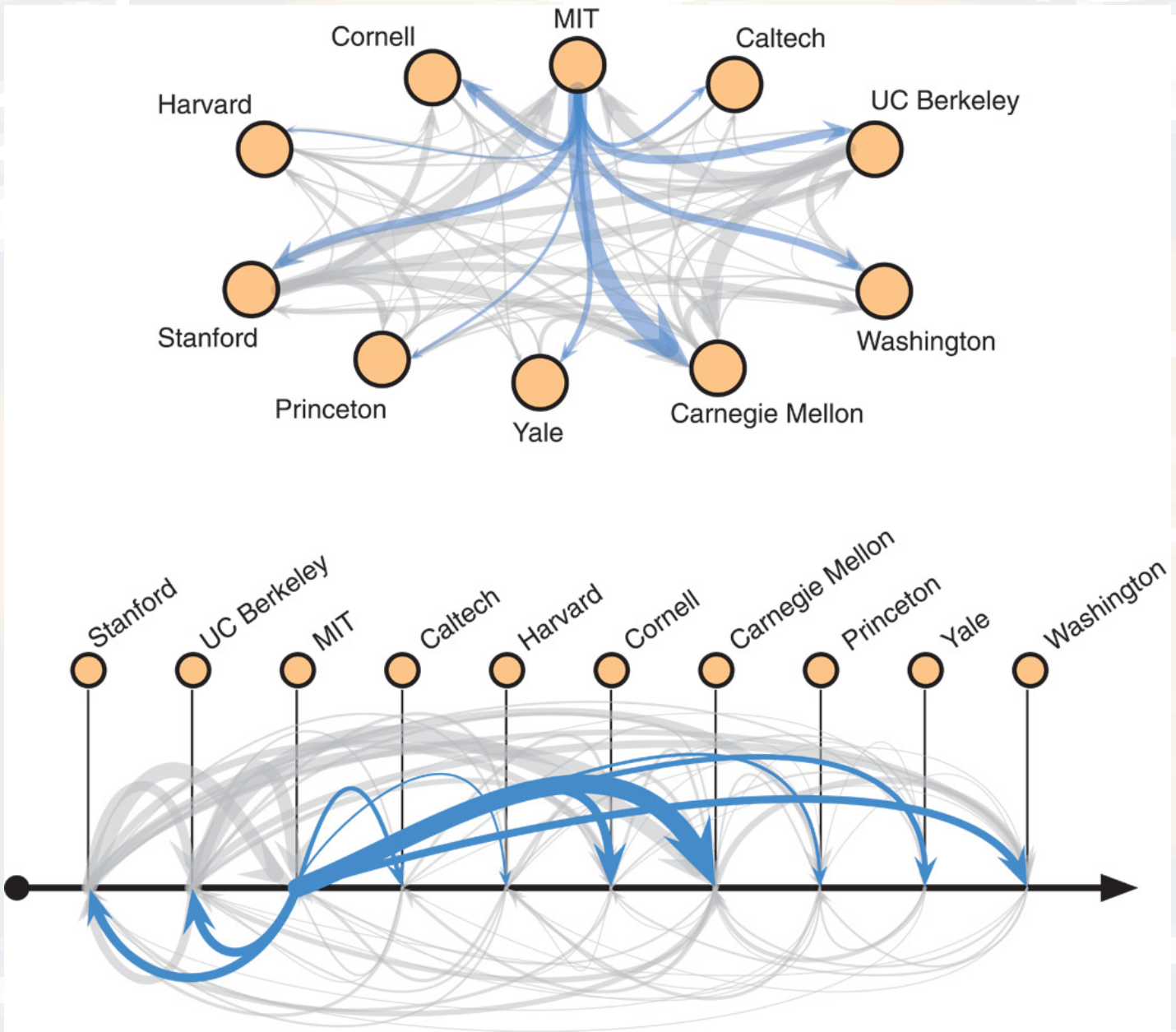
- Burris, V. (2004) The Academic Caste System: Prestige Hierarchies in Ph.D. Exchange Networks (lit. from 1958 on, querying normative ethos of science). Origins of faculty in 94 sociology departments 2004 and of history and political science. Determination of the combination of accumulated social capital, closure and departmental prestige
- Clauset, Arbesmann & Larremore (2015). 19,000 TT faculty at 461 departments or schools in computer science, history and business; **structure of faculty hiring networks**: **doctoral prestige alone** better predicts ultimate placement than authoritative rankings from the U.S. News & World Report and the NRC, (ii) **female graduates generally place worse** than male graduates from the same institution, and (iii) increased institutional prestige leads to increased faculty production, better faculty placement, and a more influential position within a discipline; **doctoral prestige alone** better predicts ultimate placement than authoritative rankings from the U.S. News & World Report and the NRC. Faculty production: **25% of institutions produce 71-86% all tenure track faculty**

Top 5 Sociology Departments before 2004 and percentage they hired from each other "Ph.D. Exchange Network"

Table 2. Sociology Departments Ranked by Number of Graduates Employed in All 94 PhD-Granting Departments

PhD-Granting Department	Rank	PhDs Hired in		
		All 94	Top 20	Top 5
Top 5				
Wisconsin	1	122	40	15
Chicago	2	111	41	13
Michigan	3	105	35	21
UC Berkeley	4	105	34	12
Harvard	5	102	50	15
Total from top 5		545	200	76
Percent from top 5		32%	48%	56%

Val Burris (2004) Academic Caste System, 247



Clauset, Arbesmann & Larremore (2015). 267 computer science faculty among 10 universities, top

Further Implications:

- Faculty at RU 1s and elites predominantly white and male holding the majority of full professor positions, tenure track everywhere else
- Doctoral students admitted and passed are mostly similar (Posselt, 2017)
- Ph.D.s from top 20 institutions circulate from undergrad to faculty positions. 25% of institutions produce 71-86% all tenure track faculty. (Clauset, Arbesmann & Larremore (2015).
- A process of academic elite reproduction sustaining control of white men (Finkelstein, Conley, Shuster, 2016)
- Exclusion and/or limitation of women and underrepresented groups preserve existing social as well as academic structures.
- Black Ph.D.s largely from same background as whites-privileged (CGS)

How Elite Universities Stand Out

- Unusually rich in resources, long established, pay faculty well, “nimbus” of prestige
- Faculty are characterized as producing significant research with high numbers of significant publications
- Faculty are distinguished by winning external grants, award, honors
- Faculty serve on national and international editorial boards, review panels, commissions
- Have been producing distinguished doctoral holders for generations

Top Ranked US Universities Shanghai 2019

- MIT
- Stanford
- Harvard
- Cal Tech
- U. of Chicago
- Princeton
- Cornell
- Yale
- Columbia
- U of Pennsylvania
- U of Michigan
- Johns Hopkins
- Duke U
- U. of California Berkeley
- U. of California UCLA
- Northwestern
- U of California San Diego
- New York U
- Carnegie Mellon
- U of Wisconsin Madison

US Universities producing the most doctorates 2016 (Green are “elite”)

- University of Texas Austin, 849
- U. of Wisconsin Madison, 823
- U. Michigan Ann Arbor, 819
- U. of California Berkeley, 796
- U. of Minnesota Twin Cities, 787
- Stanford U, 763
- U. of Florida, 730
- Purdue U. W Lafayette, 727
- Ohio State U. 716
- U. of California Los Angeles, 689
- Texas A&M College Stn & HSC, 684
- Pennsylvania State U. Uni Park, 680
- U. of Illinois Urbana-Champaign678
- Harvard U, 677
- Mass. Institute of Technology, 646
- Walden U. 635
- U. of Washington, 615
- U. of Maryland College Park, 546
- Georgia Institute of Technology 531
- U. of California San Diego, 521

Top Liberal Arts Colleges 2018 US News & World Report—Highly selective & elite

- Williams College, MA
- Amherst College, MA
- Swarthmore C. PA
- Wellesley C. MA
- Bowdoin C. ME
- Carlton C. MN
- Middlebury C. VT
- Pomona C. CA
- Claremont-McKenna C. CA
- Davidson C. NC
- Grinnell C. IW
- Haverford C. PA
- Smith C. MA
- Vassar C. NY
- Washington & Lee C. VA
- Colgate C. NY

Defining US Elite Universities from a German Perspective: College Contact.com

- Der **Wettbewerbsgedanke** zwischen den Universitäten der *Ivy League* hat sich bis heute gehalten. Inzwischen treten die Hochschulen allerdings nicht mehr nur auf sportlicher Ebene gegeneinander an, sondern konkurrieren auch um die höchsten Forschungsgelder, die besten Studierenden und Dozenten. Alle acht Universitäten der *Ivy League* sind heute **Synonym für akademische Exzellenz**. (College Contact.com https://www.college-contact.com/usa/ivy-league)
- The point is the immediate emphasis on competition as a positive way to characterize „ivy league“ elite universities—for German students!

Elite by Name

Private Ivy League

- Brown University
- Columbia University
- Cornell University
- Dartmouth College
- Harvard University
- Princeton University
- University of Pennsylvania
- Yale University

Public Ivy League

- College of William and Mary
- Miami University
- University of Michigan
- University of California Berkeley, Davis, Irvine, Los Angeles, San Diego und Santa Barbara
- University of North Carolina at Chapel Hill
- University of Texas at Austin
- University of Vermont
- University of Virginia

(College contact.com: Richard Moll)

Conclusions to this Point:

- US has highly diverse institutional types serving an equally diverse studying population.
- “Elite” institutions reproduce and sustain: 1. vertical institutional stratification 2. a closed academic job market 3. In combination with increasing closing of access for “first generation” students to Ph.D. programs blocks doctoral education as a form of social mobility.
- US elites come from diverse backgrounds, academic elites tend to have academic pedigrees and are more likely to shape US cultural elites

Contrast with German Higher Education

- Germany has a unified system subject to funding and general direction from the federal and administration by state governments.
- German universities are under many legal constraints: 1. NO Fees 2. NO general selective admissions process
- Institutional differentiation a result of growth in enrollment, historical inheritance, concentrations of outstanding researchers in a discipline, size, etc. within a similar institutional structure
- German science system developed a parallel set of research institutions to universities: Kaiser Wilhelm to Max-Planck, Fraunhofer, etc. Also state funded.

How does US compare with German System?

- Changing German tertiary landscape still directed to the privileged
- 429 Hochschulen. 240 public Hochschulen, 39 religious, 119 private, 21 of which are private universities, 95 private Fachhochschulen und 3 private Kunst- und Musikhochschulen. 14 privaten Unis in Deutschland possess Promotionsrecht
- 106 Universities, 11 Exzellenz Universities until recently: RWTH Aachen, HU und FU in Berlin, in Bremen, Dresden, Heidelberg, Köln, Konstanz, Tübingen und TU und LMU in München.. Only 17 Universitäten can compete which have at least 2 Exzellenzclustern und 2 Universitätsverbünde with at least 3 Exzellenzclustern.

Formal Purpose of Exzellenzintiative

- Auf der Grundlage herausragender wissenschaftlicher Vorleistungen im internationalen Maßstab sollen Perspektiven zu Entwicklung und Erhalt **international wettbewerbsfähiger exzellenter Spitzenforschung** einschließlich der Förderung des wissenschaftlichen Nachwuchses bewertet werden. (https://www.bmbf.de/de/die-exzellenzstrategie-3021.html)
- To provide the funds to create an environment for research which affects international ranking, to encourage competition among universities within Germany and internationally

Context

- World wide changes in how higher education is thought about increasingly in an international context, RANKINGS, perception of need to be competitive worldwide, new public management ideas for restructuring within universities and among them, influence of neo-liberal ideas on running universities. Response/reaction very strong in Germany
- The radical change of the introduction of the Bologna plan with bachelors and masters degrees—fundamental restructuring of undergraduate curriculum and introduction of point system
- Deep resistance to reforming the academic employment structure by creating an adequate number of professorships, a durable employment contract for junior academics

Context continued

- The perceived (and real) need to restructure doctoral education—partially expressed in earlier Graduiertenkollegs, now through graduate centers, graduate schools and the modernization of administration through central identification of doctoral students
- And development of a limited time to degree for the Ph.D. within Exzellenz programs/clusters
- Successful development of these new type of degrees –apparently mostly in natural sciences
- The “clustering” of new doctoral forms at Exzellenz Unis

Attendant Issues:

- Enormous amounts of faculty, admin and staff time go into proposals
- Funding is not durable, can end and potentially end the program
- It is not clear that extra money available from successful Exzellenz funding results in more or better publications. (Muench, 2010)
- German academic culture now pushed into foreign language teaching and publishing—1. international students may not ever learn German and miss a great deal from their experience 2. German language scientific publications have a limited leadership and do not “rank” highly because prestige accrues to English language publications and their citation indexes

More Issues:

- Traditionally German universities have been more or less at the same level so students studying anywhere in Germany learn at the same level with perhaps small concentrations of distinction among various disciplines at various unis
- German students attending university are already to some extent "elite" in that access mostly depends on parents' educational level and attending the appropriate secondary school, i.e. students generally have substantial social and cultural capital
- While the pre-Bologna, pre-Exzellenz structure had many organizational problems it was effectively training students for all the professions requiring a university credential

More Issues still …

- The post-War system had to solve many issues and problems as it evolved in the Bundesrepublik, not least expanding to accommodate the increasing number of students wishing to enroll.
- With many “reforms” the system retained its essentially institutional egalitarian structure
- This reflected the desire for social peace and social democracy, universities reflected and supported these values
- Social stratification in West Germany not as sharp at all as in the US, those attending university nonetheless characterize a particular social group

More Reflections

- West Germans have seemed reluctant to see much cultural good in their history or institutions, pride in a way being impossible
- A consequence seems to be diminishing the teaching of German history and culture in school by mostly teaching the 20th century.
- The apparent political enthusiasm of creating an internationally competitive set of universities “elites” rhetorically linked to the “Anglo-Amerikanisch Model” seem at odds with the reality and effectiveness of the system as a whole
- Whatever those who are advocating and facilitating “elite” German universities are doing they are not recreating Harvard or Berkeley and they have no chance of doing so

Yet More:

- The A-A model is associated with many other innovations also at odds with German tradition and social organization: 1. German universities are embedded in cities providing most services generally required of students 2. Most German students attend universities not very far from their parents' home. 3. There is none of the social apparatus (sports teams, clubs, integration of whole life as undergrads within university) which creates the kind of alumnae loyalty in US universities 4. Consequently, alumnae associations do not have much purpose because identification is weak. (This doesn't stop "branding" efforts—a tee shirt? A mug?)

Conclusion:

- Creating elite universities in Germany on the US model is almost completely impossible given the very different higher education landscapes and cultures.
- It also does not fit with the ideas of social democracy as they developed in West Germany, nor with the practice of universities in the East
- To this observer it seems a peculiar exercise at odds with German tradition and social values.
- Germany does not need elite universities!!!!

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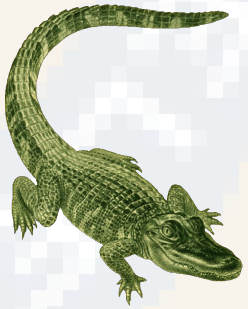
Reactions,Questions?

Thank You!

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