

Interfaces and Interactions in the Future of Linguistics

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University of Michigan
Anniversary Celebration

The problem / The opportunity

U.S. Higher Education:

– Courses taken/year:	80,000,000
– Intro Psych/year:	1,500,000
– Intro Ling/year:	50,000

An ignominious failure?

Let's say: "an enormous untapped market!"

How did this happen?

- We became a formal discipline late
 - by comparison to psychology, anthropology, language departments etc.
- We tend to define our field narrowly
 - as opposed to “big tent” attitude of anthropology, psychology etc.
- We are sometimes sectarian
 - within-field squabbling hurts all parties
- We tend to emphasize research over teaching
 - can lead to (over-)specialization
 - orphaning of many important problems

Missed Opportunities?

- Intellectual
 - Philology (1800-1900)
 - Linguistics as core of the humanities?
 - Anthropology (1900-1950)
 - Linguistics as core of the social sciences?
 - Cognitive (neuro-)science (1950-2000)
 - Linguistics as core of the mind/brain sciences?
- Pedagogical
 - Rhetoric and composition
 - Foreign languages

Colonial Philology

- Thomas Jefferson corresponded with many sources to obtain word lists in Indian languages
- Examined and compared the results of Peter the Great's Siberian expeditions
- Benjamin Franklin also collected Indian word lists

How many ages have elapsed since the English, Dutch, the Germans, the Swiss, the Norwegians, Danes and Swedes have separated from their common stock? Yet how many more must elapse before the proofs of their common origin, which exist in their several languages, will disappear? It is to be lamented then ... that we have suffered so many of the Indian tribes already to extinguish, without our having previously collected and deposited in the records of literature, the general rudiments at least of the languages they spoke. Were vocabularies formed of all the languages spoken in North and South America, preserving their appellations of the most common objects in nature, of those which must be present to every nation barbarous or civilised, with the inflections of their nouns and verbs, their principles of regimen and concord, and these deposited in all the public libraries, it would furnish opportunities to those skilled in the languages of the old world to compare them with these, now or at a future time, and hence to construct the best evidence of the derivation of this part of the human race.

Thomas Jefferson,
Notes on the State of Virginia. [Written 1781-82].

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Benjamin Barton

By a careful inspection of the vocabularies, the reader will find no difficulty in discovering that in Asia the languages of the ... tribes of the Delaware-stock may be all traced to ONE COMMON SOURCE. Nor do I limit this observation to the languages of the American tribes just mentioned... HITHERTO, WE HAVE NOT DISCOVERED IN AMERICA... ANY TWO, OR MORE LANGUAGES BETWEEN WHICH WE ARE INCAPABLE OF DETECTING AFFINITIES (AND THOSE VERY OFTEN STRIKING) EITHER IN AMERICAN, OR IN THE OLD WORLD.

New Views of the Origin of the Tribes and Nations of America

Benjamin Smith Barton M.D., Professor of Materia Medica, Natural History and Botany, in the University of Pennsylvania (1798)

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Barton as proto-Greenberg

My inquiries seem to render it probable, that all the languages of the countries of America may ... be traced to one or two great stocks...

Jefferson disagreed:

...imperfect as is our knowledge of the tongues spoken in America, it suffices to discover the following remarkable fact. Arranging them under the radical ones to which they may be palpably traced, and doing the same by those of the red men of Asia, there will be found probably twenty in America, for one in Asia, of those radical languages, so called because, if they were ever the same, they have lost all resemblance to one another. A separation into dialects may be the work of a few ages only, but for two dialects to recede from one another till they have lost all vestiges of their common origin, must require an immense course of time; perhaps not less than many people give to the age of the earth. A greater number of those radical changes of language having taken place among the red men of America, proves them of greater antiquity than those of Asia.

Notes on the State of Virginia [Written 1781-82]

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**though later,
J. considered a sociolinguistic explanation...**

Having heard that some Indians considered it dishonorable to use any language but their own, he suggested that when a part of a tribe separated itself, the seceded group might refuse to use the original language and invent their own.

“Perhaps this hypothesis presents less difficulty than that of so many radically distinct languages preserved by such handfuls of men from an antiquity so remote that no data we possess will enable us to calculate it.” **[Ms. notes circa 1800]**

Jefferson's plans

- By 1801, he had collected vocabularies for dozens of indigenous languages
 - and began to arrange this for publication
 - “lest by some accident it might be lost”
- He put off publication in 1803
 - due to the opportunity to include the results of the Lewis & Clark expedition

The sad end of J.'s linguistic career

- His linguistic papers were packed in a large trunk and shipped back to Monticello in 1809 with his other effects
- The trunk was stolen during the trip up the James River
 - The disappointed thief dumped the contents in the river
 - Only a few items floated to shore and were recovered

Jefferson to Barton (1809), sent with Lewis' vocabulary of Pani:

It is a specimen of the condition of the little that was recovered. I am the more concerned at this accident, as of the two hundred and fifty words of my vocabularies, and the one hundred and thirty words of the great Russian vocabularies ... seventy three were common to both, and would have furnished materials... from which something might have resulted. Perhaps I may make another attempt to collect, although I am too old to expect to make much progress in it.

Sir William (“Oriental”) Jones

- Lawyer appointed in 1783 to superintend British jurisprudence in India
- Founded the Asiatic Society in Calcutta “for Inquiring into the History, Civil and Natural, the Antiquities, Arts, Sciences, and Literature, of Asia”
- Learned Sanskrit because “the laws of the natives must be preserved inviolate; but the learning and vigilance of the English judge must be a check upon the native interpreters”

Jones' *Third Discourse* (1786)

- Anniversary addresses to the Asiatic Society
 - First Discourse: purposes and procedures of the Society
 - Second Discourse: a detailed research program
 - Third Discourse: on the nations of Asia

The *five* principal nations, who have in different ages divided among themselves, as a kind of inheritance, the vast continent of *Asia*, with the many islands depending on it, are the *Indians*, the *Chinese*, the *Tartars*, the *Arabs*, and the *Persians*; *who* they severally were, *whence* and *when* they came, *where* they now are settled, and *what advantage* a more perfect knowledge of them all may bring to our *European* world, will be shown, I trust, in five distinct essays; the last of which will demonstrate the connexion or diversity between them, and solve the great problem, whether they had *any* common origin, and whether that origin was *the same*, which we generally ascribe to them.

The Indo-European Hypothesis

The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek; more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologist could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists; there is a similar reason, though not quite so forcible, for supposing that both the Gothick and the Celtick, though blended with a very different idiom, had the same origin with the Sanskrit, and the old Persian might be added to the same family.

Jones' American connection

- Jones was a radical Whig and an early political supporter of the American Revolution
- Met Benjamin Franklin at the RS in 1771
- Visited Franklin in Paris in 1779, 1780, and 1782
 - To explore compromise peace plans
 - To deal with a client's property claims in Virginia
 - To obtain a pass for travel to America
 - considered emigration to Charleston or Philadelphia!
- Many weeks of political and philosophical conversations
- Indirect communication with Jefferson
 - Relations to the *Virginia* manuscript?

What's the point?

- Linguistic research was at the intellectual (and political) center of the Enlightenment
- In 1800, (proto-)linguistics had a central place in the new intellectual movements of the time
 - Even linguists are mostly ignorant of the history!
- Analogous role since then, e.g.
 - Boasian anthropology, linguistic philosophy (1900)
 - Information theory, cognitive psychology (1950)
 - etc.; *and again the history is mostly unknown, and certainly untaught!*

Is Linguistics still central?

the evolutionist: If you wanted to bring Aristotle up to date on biology, what would be your reading list for him?

John Maynard Smith: Well I think top of any reading list for someone back then would have to be *The Origin of Species*. He might get something out of Chomsky, you know, linguistics, I think he'd find that interesting.

The problem

- The discipline of linguistics is small, weak and inward-looking
- Public discourse on language is
 - balkanized
 - often uninformed
 - usually led by members of other disciplines
 - journalists, psychologists, etc.
- Discourse in more specialized areas is similar:
 - commerce
 - technology
 - medical/clinical
 - the academy

Solution:

let's (re)claim the territory of language

- In research
- In pedagogy
- In clinical applications
- In technology
- In public discourse

Not because these areas belong to our field by right, but because the world needs a field that solves its linguistic problems!

The chicken and the egg

- Disciplinary growth depends on results
- Results depend on disciplinary growth
- How to get a virtuous cycle started?

Elements of a plan

- Take an inclusive attitude
 - nothing linguistic is outside the disciplinary tent
 - non-linguists are welcome collaborators
- Focus on undergraduate education
 - determines academic resource allocation
 - 10x increase in enrollments?
- Reform graduate education
 - increased breadth of preparation
 - relations with other departments
- Promote and value public policy discussions
- Broaden research profile
 - pluralism but high standards
 - longer half-life of results
 - focus on big issues

The future is bright

- Intellectual opportunities
 - All the basic problems are still open
 - leverage from
 - New apparatus
 - New mathematics
 - New resources
- Educational opportunities
 - Student interest in language and its use is high
 - though phonology problem sets remain a tough sell
 - Intellectual orphans: rhetoric, foreign languages
 - Low starting point offers great proportional upside!
 - multiplying enrollments by 5 is fun!

Some research opportunities

- Language description and documentation
 - endangered languages
 - applications in technology and education
 - data publication strengthens the empirical foundations of the field at large
- Reading instruction and remediation
- Models of communicative interaction
 - relevant to psych, anthro and telecom!
 - easy & interesting route to student research
 - about to be revolutionized by data publication
 - lowers barriers to entry
 - permits checking and replication

Some Interdisciplinary opportunities

- Cognitive neuroscience of language
 - and language use!
- Evolution of language/communication
 - Agent-based modeling
 - Molecular genetics
- Human language technology

Some pedagogical opportunities

- Intro linguistics with emphasis on broad intellectual, historical and social issues
- Rhetoric and composition
- Foreign language learning/use
- Linguistic research areas that are easily accessible to undergraduates