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WHAT IS TIME (AND WHY SHOULD LINGUISTS CARE ABOUT IT)?

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An indisputable fact of life and of nature is that humans and human institutions necessarily both exist in and live through time. The importance of this fact and the conscious recognition of it is reflected in the concern for the passage of time and for humans' place vis-à-vis time observable in various sorts of artistic expression, from the visual arts such as sculpture and painting to various reflections in literary and even musical sources. Taking the arts as my point of departure, I first outline here and then contrast different views of time from within different domains and disciplines and from different vantage points, discussing in turn the artist's, the physicist's, the linguist's, and, ultimately, the ordinary speaker's view of time. I then contrast continuity across time with change across time, and illustrate continuity amidst change through an extended case study of the past-tense marker in Indo-European languages known as the 'augment', examining its stability and change throughout all of attested Greek, from Mycenaean Greek of the second millennium BC up through Modern Greek of the present day, with particular focus on its realization in certain regional dialects of the modern language. The augment thus provides an important object lesson in linguistic continuity and change, as it proves to be a remarkably durable but at the same time intriguingly elastic morpheme, at least as far as Greek is concerned. Since the view of time that I ultimately dwell on leads me to a consideration of time and history, I end with some observations on both the history of the field and my own personal history.*

Keywords: time, continuity, change, Greek, augment, uniformitarianism, LSA history

1. Introduction.[1] First of all, I want to say to all experiencing this article in whatever modality:[2] thank you for doing so, and I want to offer thanks multilingually, in a sampling of languages in which I know how to do so, thus: ευχαριστώ (*efxaristó*), *falemnderit*, *dhanyavādaḥ*, *gratias agō*, *mulțumesc*, благодарјам (*blagodarjam*), *ačiū*,

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[1] So much has changed in the world between January 2020, when I delivered these remarks, and the summer months when I am writing them up, with the coronavirus pandemic, the concomitant economic angst, and the movement for social justice and racial equality spurred by the national and indeed global reaction to senseless murders of Blacks at the hands of lawless individuals, including police. These extraordinary and momentous events make my efforts here at substantial scholarship presented in a somewhat light-hearted and, hopefully, entertaining way seem almost trivial by comparison. Nonetheless, I persist with them in part because my interest in history, both of language and of our field, impels me to want to represent the 'Urtext' of my New Orleans address, but largely and more importantly because I have a deep-seated belief in the value of knowledge and of the pursuit of knowledge that I hope these pages represent. As I see it, ignorance is a cause of racism, so that knowledge, as an antidote to ignorance, besides being valuable in and of itself (as an ideal) and a crucial component for achieving economic equity, is a key piece of the battle to combat racism.

[2] My thanks were meant originally, of course, to be directed to the audience and anyone viewing the address on the LSA's live-streaming of the event, but I extend my gratitude also to anyone reading this now. And I must also thank Rich Janda, for the extraordinary—and extraordinarily kind—introduction to my address, available as online supplementary material to this article (http://muse.jhu.edu/resolve/113).

šukriya, спасибо (*spasibo*), *merci*, *gracias*, *grazie*, *mîkwêc*, *todah rabah*, *tešekkür edirim*, *šukran*, and *eskerrik asko*, and THANK YOU (Figure 1).

FIGURE 1. THANK YOU (ASL).

This address comes at the end of my year as president, so that it serves as my valedictory, a chance to reflect on the year but also to say something substantive about linguistics. Different presidents have focused on and been involved in different activities and initiatives. Penny Eckert before me, for instance, pushed for the much-needed Civility Policy for the LSA (see https://www.linguisticsociety.org/content/lsa-civility-policy) and all that it entails. In my case, I was fortunate because the more expansive form of that initiative was implemented on my watch,[3] so to speak, and it took no real effort on my part to get behind it, as it was and is important.[4]

But there is more—I am very proud to have been president during the International Year of Indigenous Languages (2019, so proclaimed by the United Nations),[5] even though again I can claim no credit for all that the LSA did on this important initiative through various committees and the work of dedicated individuals throughout the year.

So too with initiatives from members, such as Anne Charity Hudley's and Christine Mallinson's LSA Statement on Race (https://www.linguisticsociety.org/content/lsa-statement-race), which was adopted during my year as president.[6] And I also benefited from a robust linguistics-in-secondary-schools initiative (spearheaded by Rich Larson) and have done what I can to extend that locally in Columbus, OH, with help from two students of mine at the Ohio State University (OSU): undergraduate (now B.A.) Victora Paxton and graduate student (and soon-to-be Ph.D.) Carly Dickerson.

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[3] And see also https://www.linguisticsociety.org/content/lsa-revised-ethics-statement-approved-july-2019 for a broader revised statement.

[4] Perhaps all the more so now in the light of an emerging concern for equity, compassion, and understanding in the way we as professionals treat everyone we interact with.

[5] See https://www.un.org/development/desa/dspd/2019/01/2019-international-year-of-indigenous-languages/.

[6] See also Charity Hudley et al. 2018, as well as now Charity Hudley, Mallinson, & Bucholtz 2020.

So I am not sure what my legacy will be, if indeed there is any sort of legacy to those who have occupied the LSA presidency, but I did take the history of the field and of the LSA seriously in pushing for posts on the LSA website during Black History month (February 2019) on Mervyn Alleyne;[7] during Women's History month (March 2019) on the history of COSWL, the LSA Committee on the Status of Women in Linguistics;[8] during LGBT History month (October 2019) on the history of OUTiL, the Out in Linguistics group for LGBTQ+ linguists and linguistics;[9] and just for fun about LSA foundation member, spy, and baseball player Morris (Moe) Berg;[10] and I also worked toward getting the 'LingStoryCorps' initiative going in advance of the LSA's centennial in 2024.[11] Here I offer a shout-out to Margaret Thomas for her help in all of this, and to volunteers Clint Awai, Shuan Karim, and Seung Hwan Kim, who have worked on this project here at the LSA meeting, and to Georgia Zellou and her team of students—Jazmina Chavez, Patricia Sandoval Maysonet, and Peter Torres—who helped as we piloted the project at the LSA Institute at the University of California, Davis, in the summer of 2019.

And speaking of history, I have to say how humbled I am when I consider the roster of past presidents of the LSA with whom I share this stage in spirit; it is a virtual who's who of Linguistics—giants of our field—and it includes not only members of my dissertation committee (David Perlmutter and Calvert Watkins) but also other scholars from whom I learned much, and many among the thought leaders in linguistics today; three were classmates of mine in graduate school (Sandy Chung, Ellen Kaisse, and Alice Harris (with whom I shared a cubicle in Holyoke Center)). Moreover, some of these former presidents are among my 'heroes' in linguistics, and I can mention specifically here Calvert Watkins, Eric Hamp, and Leonard Bloomfield. And mentioning Bloomfield, who spent time at OSU as a professor of German from 1921–1927, allows me to include a shout-out to fellow Buckeyes, OSU colleagues who have been LSA presidents, most recently Arnold Zwicky (1992) and before him Ilse Lehiste (1980), and before her George Melville Bolling (1932).[12]

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[7] See https://www.linguisticsociety.org/content/month-lsa-history-mervyn-alleyne, written by Harry Hoy of Boston College. I have to say that pushing for attention to Black History month is important, to be sure, through the recognition it offers to substantive contributions by linguists of color, but in a certain sense its importance is lessened when compared to the need for social justice that has been highlighted by the Black Lives Matter movement.

[8] See https://www.linguisticsociety.org/content/month-lsa-history-committee-status-women-linguistics, written by Margaret Thomas of Boston College.

[9] See https://www.linguisticsociety.org/content/outil-historical-note, written by Arnold Zwicky of Stanford University.

[10] See https://www.linguisticsociety.org/content/new-documentary-features-lsa-foundation-member-moe-berg, written by Seung Hwan Kim of Boston College.

[11] 'LingStoryCorps' is the name I have given to a project modeled on the Story Corps initiative (details at https://storycorps.org/) by which anyone in linguistics (broadly construed) can speak and be recorded (audio only) for fifteen minutes or so about something of interest to them, their personal history in linguistics, where they see the field going in the coming years, memorable or inspiring individuals they have encountered, and so on. It is my hope that by recording all comers at annual meetings and the biennial Institutes, as well as in our own departments, we will build an oral history archive of the LSA, and thus at the time of the LSA's centennial we will have both a retrospective and a prospective view of the field, in the words of the participants and practitioners themselves. While the effort is stalled at present due to the coronavirus pandemic, I see this just as a temporary hiatus, and I hope to get it going again once we turn the corner on the virus.

[12] I feel a special connection with Bolling, since, like me, he had a Classics background and was an editor (in fact, the first editor) of *Language*.

I can add here that not only Bloomfield, then of the OSU German Department, but also several others at OSU from various departments, among them Bolling, played a key role in 1924 in the founding of the LSA, ultimately being LSA foundation members:[13]

- Claude Anibal (Spanish)
- Leonard Bloomfield (German)
- George Melville Bolling (Greek)
- Wallace Elden (Latin)
- Erwin A. Esper (Psychology)
- E. F. Hacker (Romance Languages)
- Olin H. Moore (Romance Languages)
- S. B. Smith (Latin)
- Albert P. Weiss (Psychology)
- Miss Ruth M. Keller (B.A./B.S./M.A.)

Also among the past presidents of the LSA is my doppelganger Larry Hyman, as you can see for yourself in Figure 2.

FIGURE 2. Larry Hyman, LSA President (2017).

Some readers might be thinking they are seeing double—'Wait', they might be saying to themselves, 'didn't Larry already give the presidential address two years ago in Salt Lake City? And wasn't the title then something like the title here but about tone, not about time?' (Actually, it was 'What tone teaches us about language'.[14]) To such readers, I say no, Larry is NOT the Grover Cleveland of the LSA, serving two nonconsecutive terms as president; he and I really are distinct people, as a photo from the 2012 Portland LSA meeting proves (Figure 3).[15]

[13] See Joseph & Dawson 2004 for some details about these foundation members. During Bloomfield's time at OSU, he was among those drafting and circulating the Call for the Organization Meeting (dated November 15, 1924, and later published in *Language* 1(1).6–7) that called for the formation of a linguistic society. See also Falk 2002 on Bloomfield's role.

[14] Published as Hyman 2018.

[15] That is me on the left.

FIGURE 3. Two distinct LSA Presidents.

My presentation here is a blend of some history of the field, some language history, some personal history, some quasi-philosophical musings, and some of my research findings, all tied in with the general theme of time and language.[16]

In some ways, therefore, as what I have written so far indicates, this is a kind of personal odyssey, taking readers through some of my own professional development but also touching on research areas that have been especially important to that development and a number of languages that have been a focal point for me, specifically Albanian, Avestan, Old Irish, and Sanskrit, but most of all, Greek.

2. WHAT AM I TALKING ABOUT? Let me start (with apologies to St. Augustine)[17] with a mechanical sort of beginning for a talk with a title such as mine, and explore what some authorities say about what time is. Here is the definition of *time* given in the *Oxford English Dictionary* (*OED*).

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[16] I actually feel upstaged a bit, because the 2019 instantiation of a now-annual conference (VocUM) 'organized by a multidisciplinary team of students from the Université de Montréal' (see https://vocum.ca/en /about-us/) that was announced in June of 2019 had as its general focus the topic of language and time, and mentioned in its call for papers some of the same themes that I had hoped to touch on here; I give below an abridged version of the call (https://vocum.ca/en/vocum-2019/), with themes of concern here in bold, but I swear I had been thinking about them for a long time (nearly all of my career, in a certain sense)—so I like to think of this not as my being scooped but rather as great minds thinking alike:

> The theme for VocUM 2019 is … *Language and time*. **Though essential, time has always been difficult to define.** Archeological artefacts resembling lunar calendars suggest that humans were already measuring time as early as the Paleolithic. The first solar calendars appeared in antiquity, namely in Egypt. During the Enlightenment, Isaac Newton's *Principia* (1687) includes time, considered as absolute, in the core concepts of classical mechanics, alongside speed, inertia, and force. Finally, in 1905, Albert Einstein's theory of relativity revolutionized our conception of time, revealing the inextricable link it shares with space. Involved as it is in some of the most fundamental physical laws, time inescapably influences the universe and, consequently, humanity. Language, the ultimate human faculty, is similarly constrained by time.
>
> VocUM 2019 thus urges us to reflect upon **the interaction between language and time**: time within language and conversely language in time. To do so, VocUM is happy to welcome multiple research perspectives, in which time plays diverse roles. … **The lens of history** can also be particularly productive, as it allows us to situate in time various oral, signed or written language practices: **history of languages** … . **Literary or cinematographic works in which time constitutes a central them [sic] can also be considered**. ... Similarly, **natural language's inherent sequentiality**, and that of its various processes, *de facto* entails a temporal dimension.

In any case, it suggests that this topic is particularly timely, so to speak.

[17] See Rich Janda's introduction in this regard.

(1) **Time:** A finite extent or stretch of continued existence, as the interval separating two successive events or actions, or the period during which an action, condition, or state continues. (*OED* s.v.)

And I offer as well what a colleague of mine at OSU, astrophysicist David Weinberg, gave me as a more concise but similar definition: 'time is that in which things change' (and we might even emend that to ' … that in which shift happens').[18]

But I want to move away from such characterizations to different realms where time matters. Thus, let me offer the observation that humans have always had, and continue to have, an 'uneasy' relationship with time, and this is amply reflected in art, as a means of the expression of the deepest of human concerns and yearnings. Indeed, as examples to come amply illustrate, time is a phenomenon that has both plagued and intrigued great writers, artists, and musicians over the years, hence my reference to an 'uneasy' relationship with time; such a relationship is something that humans have experienced since time immemorial, so to speak.

So I want to start by surveying some of the artistic testimony to the importance of time to humankind and to particular interpretations of time and of human interaction with and interpretations of time.

One of the most telling and representative art works regarding time is Salvador Dalí's 1931 painting 'The persistence of memory', with its iconic melting clocks, seen in Figure 4.
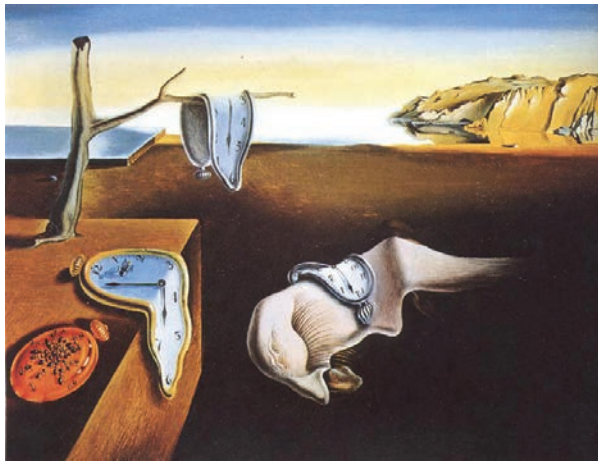

FIGURE 4. 'The persistence of memory' (© 2020 Salvador Dalí, Fundació Gala-Salvador Dalí, Artists Rights Society; reproduced by permission).

Further, we can go beyond this painting and point to another of his, from 1957, 'The disintegration of the persistence of memory', with its continuation of the theme of melting clocks, seen in Figure 5.

And in other visual arts, I offer the following, a sculpture by artist Dimitar Lukanov, installed at Terminal 4 of JFK airport in New York, called 'History of time' (Figure 6).[19]

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[18] With apologies to friend and collaborator Hans Henrich Hock, who I believe originated the *bon mot* that 'shift happens' as a way of characterizing what historical linguists think about.

[19] This sculpture is one of a three-work set by artist Lukanov that was commissioned in 2012 specifically for Terminal 4 as part of a renovation project. The works were completed in 2014. For details on this and other intriguing pieces by the artist, see https://www.dimitarlukanov.com/.

FIGURE 5. 'The disintegration of the persistence of memory' (© 2020 Salvador Dalí,
Fundació Gala-Salvador Dalí, Artists Rights Society; reproduced by permission).

FIGURE 6. 'History of time', by Dimitar Lukanov, image courtesy of Dimitar Lukanov Studio,
reproduced by permission.

And I can refer here to a conference and artistic exhibition at my home institution
from two years ago, 'Metaphors of time: An interdisciplinary conversation across the
arts, humanities, and sciences' (https://u.osu.edu/time/), where the rationale for the con-
ference actually specifically mentioned language:

> Time and temporal phenomena are crucial to many disciplines and within cultures around the globe, past
> and present. Yet what people mean by 'time' varies, and the words available in different languages,
> whether disciplinary or vernacular, often fall short of describing the ephemerality of temporal experience.

So, time is and has been on artists' minds.

Creative writing too and great literature offer us some important perspectives on
time. William Shakespeare (my mother's area of expertise as an English professor) in
The tempest (Act 2, Scene 1) noted famously that 'What's past is prologue', and

William Faulkner in *Requiem for a nun* wrote that 'The past is never dead. It's not even past'. And we can consider the following excerpt from one of my favorite authors, Kurt Vonnegut; in *Palm Sunday* (1981), he reproduced what he had said at the dedication of the new library at Connecticut College:

> Like life itself, this speech will be over before you know it. Life is so short!
>
>   I was born only yesterday morning, moments after daybreak—and yet, this afternoon, I am fifty-four years old. I am a mere baby, and yet here I am dedicating a library. Something has gone wrong.
>
>   I have a painter friend named Syd Solomon. He was also born only yesterday. And the next thing he knew, it was time for him to have a retrospective exhibition of his paintings going back thirty-five years. Syd asked a woman claiming to be his wife what on earth had happened. She said, 'Syd, you're fifty-eight years old now.'
>
>   You can imagine how he felt.[20]

We also see reflections of this concern for time in music: the oldest complete musical composition that we have, the ancient Greek song that is the epitaph of Seikilos from the second century AD, contains a lamentation about the passage of time.

(2) hoson   zēs   phainou,   mēden holōs   sulupou   pros
    as.long.as live.2SG shine.IMP.2SG nothing completely regret.IMP.2SG for
         oligon esti to zēn   to telos   ho khronos apaitei
         little is   the live.INF the end.ACC the time.NOM demands
      'While you live, shine! Regret nothing at all! For life is short; time demands the end.'

One of my mother's favorite song lyrics came from Harry Belafonte's 'I do adore her' (1956), 'Time makes fools of men they say', and of course, the Rolling Stones famously sang 'Time, time, time is on my side, yes it is' (in 'Time is on my side', 1964).

   But looking to music gets even better in terms of questions we might be asking. That is, the Grateful Dead, in their song 'Uncle John's Band' (1970), ask 'Wo-oh, what I want to know—oh, where does the time go?'. We can supply two answers here. One comes from fellow rockers the Steve Miller Band: 'Time keeps on slippin' slippin' slippin' into the future' (from 'Fly like an eagle', 1976). This answer is maybe not from the most cogent of sources, but we can consider another answer, from a Nobel laureate, not, however, in Physics but in Literature, Bob Dylan (prize awarded 2016).

   (3)   The present now will later be past   ('The times they are a-changin''; 1964)

And, here is what a real physicist (and Nobel Laureate, 1921) has said about time, a famous quote from Albert Einstein that essentially summarizes the view of time that emerged out of his theory of special relativity from 1905.[21]

   (4)   The distinction between the **past**, **present**, and **future** is only a stubbornly persistent illusion.

And, to return to artistic expression, but also from a Nobel Prize winner (1948, in Literature), we can note T. S. Eliot's quote regarding past, present, and future, eerily reminiscent of Einstein.

   (5)   Time present and time past
         Are both perhaps present in time future,
         And time future contained in time past.   ('Four quartets: Burnt Norton', 1–3; 1936)

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[20] For the record, as I write these words, I am sixty-eight years old, so you can imagine how **I** feel!

[21] This quotation is widely cited, always attributed to Einstein but not given a precise source; my understanding is that it may have come from an interview with the great thinker and is not found as such in his writings.

So based on this evidence, we can contrast the artist's view of time with the physicist's view of time; there is some convergence of thought, but some divergences also. And, there are other views to be added to these, as in what follows below.

Turning now to language, what would or, better, what could these various statements, especially Einstein's and Eliot's, mean from a linguistic standpoint? Addressing this question allows us to get a sense of two other views of time, that of linguists and that of speakers, so to move in that direction, let's first take a detour and delve into discourse and consider a favorite topic that humans discourse about, namely the weather.

My wife, Mary Clark, has made the following observation on the weather on numerous occasions: the weather you get in any given month is typically (in Ohio at least) a mix of 'borrowing' from the previous month and looking ahead to the month to come. This can be seen clearly in the average monthly high and low temperatures and the record highs and lows for Columbus for the middle (the 15th) of each month (Table 1).[22]

	MARCH	APRIL	MAY	JUNE
AVG HIGH/LOW	52°/32°	63°/41°	73°/52°	82°/61°
HIGHEST/LOWEST	79°/4°	84°/22°	92°/36°	96°/47°

TABLE 1. Temperatures in Columbus, Ohio.

Focusing on April (Eliot's 'cruelest month'), while its average high and low are above those of March and below those of May, we can see—taking the record high and low mid-month as representative of the possible extremes—that it can have some March-like days with lows below March's lows, and some May-like days, with highs above May's highs, and in general such is the case too for each month and its neighboring months on either side.

To finally turn fully to language, the same can be said about languages. At any given point in time—'synchrony'—a language is a blend of material (sounds, constructions, vocabulary, etc.) carried over from the past, mixed together with innovative alterations to the material in the system, including additions to it.[23] Those innovations in a sense are (or can be) the future of the language, indicators of where it is heading.

Since each synchronic moment is a present state, this means, à la Einstein and Eliot, that the PAST, PRESENT, and FUTURE come together in a language at any identifiable synchronic stage. In this way, there is an ongoing tension between CONTINUITY, that is, the past reflected in a synchronic present moment, and CHANGE, that is, the seeds of future states. This is a constant for any language, and indeed, for virtually all human institutions.

At this point, we can add into this mix ordinary people—as speakers of a language— and their sense of time … and also a linguist's sense.

My feeling is that linguists are in a position to take a 'long' view of time and diachrony. Tools such as the COMPARATIVE METHOD, the philological interpretation of the evidence of inscriptions and texts (of all sorts) and such from the past (including the recent past), and the exploitation of corpora of spoken and written language give us 'long time'. Using these tools, the linguist is able to see the distant past, and even to peer into

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[22] Average temperatures as of September 2020 from http://www.rssweather.com/climate/Ohio/Columbus/, confirmed at https://www.currentresults.com/Weather/Ohio/Places/columbus-temperatures-by-month-average.php. Mid-month highs and lows are from https://www.weather.gov/iln/climate_records_cmh.

[23] I am not at all certain about the exact source of this view, but I know I have heard it from Mark Hale, Eric Hamp, and Rich Janda at various times over the years. As it seems to me to encompass a timeless truth about language, it may well represent an independently arrived at view on the part of these fine linguists, and others as well.

the unrecorded past, that is, a reconstructed past evident only from the evidence of its legacy in later linguistic data. The linguist thus is able to discern long-term developments that appear to be 'cycles' (e.g. Jespersen's cycle involving negation), perhaps better called 'spirals' (à la Antoine Meillet—see van der Auwera 2009, n. 2 on this), since there is typically what we might call 'forward' progress, not a return to earlier states; also, linguists can see what appear to be recurrent sorts of events of the type we would therefore label as 'natural'.

Speakers, however, probably care only about 'short time', an 'extended present'. In this regard, Ferdinand de Saussure's observation (from his 1916 *Cours de linguistique générale*, p. 90) is highly pertinent: 'to the speech community, synchrony is the only true reality'. But it is fair to ask just what synchrony is for a speaker. We can note that Hay and Foulkes (2016) talk about 'remembered time':

> we attempt to access layers of learning by examining speakers' discussions of different times in their lives. If individuals store phonetically detailed memories over a long time period, they may access older variants when talking about older events. In other words, if there is a linguistic change in progress, the nature of that change should be replicated by speakers, visible across their speech about distant versus recent events. (Hay & Foulkes 2016:304)

> Accounts of autobiographical memory distinguish between episodic memories for past events and more abstracted, semanticized memories—broadly what is 'remembered' versus what is 'known' about the past (Tulving 2002). Accessing episodic memories 'entails a vivid sensory-perceptual reexperiencing of the event, including first-person perceptions, thoughts and emotions that accompanied the original experience' (Prebble et al. 2013: 818). (Hay & Foulkes 2016:322)

Thus, speakers live in what is really an 'extended present', what philosophers refer to as the 'specious present'.

Admittedly, 'remembered time'/'extended present' is a mild kind of diachrony, based on a speaker's individual, personal diachrony; it is a diachrony over what can be a relatively short time-frame. This can be illustrated through a nonlinguistic example. When driving, one often encounters a sign about traffic lights at an intersection saying: 'Signal operation changed', as in this picture from an intersection on the OSU campus (Figure 7).

Figure 7. Traffic sign from the OSU campus.

What is important here is that this sign is irrelevant information for someone coming to that traffic light for the first time. Such a person can only interpret the situation in synchronic terms, and the new sequence—that is, the one valid at the current moment—is all that matters. For someone who drives on that road often, or even at least once be-

fore, this is useful information, because their routine, their familiarity with the intersection, constitutes a synchronically relevant diachronic dimension that they carry with them as they confront their ongoing continuing synchrony.

I would like to suggest that the same is true with regard to language for speakers; as we go through familiar routines, we bring aspects of the past into play in our present reality. These routines, precisely because they are ingrained routines that are familiar and create expectations, are part of our extended present, part of our 'remembered time'—that is, part of our knowledge of the past that we bring with us throughout our passage through time.

3. Some consequences of this view of time. The view expounded here of the relation between speakers and time on the one hand and linguists and time on the other has several consequences for us as linguists and especially as historical linguists, with regard to how we interpret data and the methodology we employ. Let me enumerate and explicate these consequences.

3.1. First. We often interpret observed and encountered differences from our expected routine as being evidence of change, which may or may not be true. Difference does not necessarily indicate change, that is, someone actually actively changing what had been your usage. Still, this interpretation is perfectly understandable from a speaker's point of view; Fred Householder discussed this in his 1981 presidential address (published 1983) and referred to 'kyriolexia', which literally means 'literalness' but which Householder used to mean essentially an individual speaker's sense of a norm (literally) against which to judge other variants.

Related to this is what Arnold Zwicky called the 'recency illusion' in a 2005 post on *Language Log* (Zwicky 2005), also discussed recently by Janda 2020. As Zwicky puts it, this illusion is 'the belief that things you have noticed only recently are in fact recent'. Janda explicitly cautions against using such observations as a methodology for identifying change.

3.2. Second. It is important to note that there can be change in short time. For instance, we can point to the rise of trendy lexis, the use of words or phrases that dominate discourse and media for a brief time and then fade from use or become just ordinary items: for example, *twerk* for a sexually suggestive type of dance, first attested in this sense in 1993 (*OED* s.v.) but which enjoyed a brief renascence in 2013, or the spread of phrases used as metaphors like *low-hanging fruit* or blends like *(draw a) red line in the sand* (*draw a line in the sand* (to indicate a limit) crossed with *red line* (representing a limit)), or syntagms like *because + NP* that was the subject of considerable attention at the LSA annual meeting in 2013 and especially the American Dialect Society when it was chosen as a word of the year. We can wonder about the lasting power of such trends, but they do bespeak changes nonetheless, even if somewhat ephemeral ones.[24]

3.3. Third. Relatedly, we can witness real change within our lifetime. For instance, there is a suburb just west of Columbus known as *Hilliard*. That town was originally called *Hilliards*, short for *Hilliard's Station*, since it was founded along a railroad route. Sometime after the 1950s, it came to have its present designation of simply *Hilliard*, even though some older residents in at least the early 2000s still kept the *-s*. Thus there

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[24] For all of the attention that the innovation regarding *because* got, it seems to me that it is not a very surprising development from the perspective of analogical pressures within English today. The elision of *of*, whereby *because of NP* became *because NP*, is structurally exactly parallel to, say, *inside of the house → inside the house* and the situation with other synchronic prepositions that etymologically derive from complex PPs.

has been a subtle but real change in the suburb's name and so too in the usage of Central Ohioans in referring to that place.[25]

As a methodological aside, I note that the distinction between older residents with *Hilliards* and younger speakers with just *Hilliard* shows the value and importance of the apparent-time construct as a way of making inferences and hypotheses about language change. This construct is related to the UNIFORMITARIAN PRINCIPLE that William Labov and his acolytes have used so effectively, namely, that the processes of change evident today were applicable and present in earlier times. Exploiting apparent time offers another tool that can be used for a glimpse into the past, but one that is based in individuals' personal diachrony spread out across the speech community.

And we can no doubt witness these effects of age-related differences repeatedly in our daily lives as we evaluate what we hear from others. I mention one such case from my own life in recent years because the other person involved is a former student of ours at OSU (and now a successful academic). Some years ago, at a gathering at my house of sociolinguistics and historical linguistics students, I mentioned something about when I was courting my wife, and one of the students there, Katie Carmichael (now a professor at Virginia Tech), said in a totally nonderogatory way and just as a (sociolinguistically informed) reaction, 'Ohhh *court*—how cute, how quaint, how old-fashioned!'.

3.4. FOURTH. We can experience differences that stand out as synchronic anomalies, and we can learn from them about history. An illustrative example has to do with one of the so-called traditional 'fight songs' associated with OSU football and sung at football games even today.[26] The song, written around 1906, is 'I wanna go back to Ohio State'; it starts like this:

> I wanna go back to Ohio State
> To old Columbus town, ….

and so on. The last line of that song is (emphasis added):

> We'll win the game or **know** the reason why

and it has always intrigued me. I've wondered what it really means, and in particular why we would not know the reason for a loss at the end of a game, for example, a lost fumble or a costly roughing-the-kicker penalty, taking the word *know* in its now-usual sense of having knowledge of or understanding something. And especially the disjunct of winning or knowing has also always seemed strange to me. To me, a more sensible meaning here for *know* would be 'find out' or 'learn', that is 'We'll win the game or LEARN the reason why'. Of course, as a historical linguist, I wondered if *know*'s meaning had shifted at some point. And, here, the *OED* provides an answer: one meaning given for *know*, marked as being now obsolete, is 'learn, ascertain, find out'—we might now say rather 'come to know'—obviously now supplanted by the other more familiar meanings.

> (6) **Know … 14.** *transitive*. To have knowledge or information concerning (something), esp. as a consequence of observation, inquiry, or study; to have ascertained, learned, or found out; to have a correct idea or understanding of. **Formerly also: †to learn, ascertain, find out (obsolete).** (*OED* s.v., emphasis added)

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[25] This example is documented and discussed in Joseph 2007, 2008.
[26] Also discussed in Joseph 2007.

Clearly, then, that line was written when this meaning of 'find out' was not obsolete. In this anomalous meaning of the fixed phrase *know the reason why* as compared to the current meaning of its individual parts, we see evidence for change in our language, in the change of meaning of this very common verb, over a relatively short period of time, brought to light by the synchronic anomaly of the line in the Ohio State fight song.

The restriction of the older meaning to a limited context, embedded in what is for all practical purposes part of a ritual utterance,[27] is something seen in countless cultures and is especially well instantiated in ancient Indo-European languages and the often-ceremonial religious texts that illustrate them. The work of my mentor Calvert Watkins on ritualistic language involving grains in ancient Indo-European languages is a case in point, as he observes that the Homeric phrase *álphi kaì húdōr* 'barley and water', with its archaic noun form *álphi*, occurs in what he calls (Watkins 1978) a 'solemn utterance', one that has a ritual use, with parallels in Hittite and Vedic Sanskrit.

3.5. FIFTH. Although these isolated examples of language change are admittedly not particularly earth-shattering, they do have a certain significance. In particular, after years of studying the phenomenon of language change, I am firmly of the opinion that language change on a large scale is really nothing more than the accumulation of changes on a small scale, such as the syntax of *because*, the form of the town name *Hilliard*, the meaning of *know*, and so forth, and one never knows which small adjustment will catch on and spread to become something larger in scope.

By 'large scale', I mean the sorts of changes that have led to English and German becoming different languages even though they share a common Germanic source, or to French and Spanish being so different even though both spring from Latin. But these large differences—the result of changes that affected each language individually as it split off from a common starting point—all started with small alterations, with small differences between speakers in matters of detail. Small changes are precisely what we see distinguishing older and younger speakers regarding *Hilliards* versus *Hilliard*, or different relatively closely adjacent chronological stages of English, in the case of *know*.

3.6. SIXTH. The 'short time' view discussed above means that some constructs that linguists take for granted may not mean much to speakers. So it is, in my view, with cycles, alluded to earlier ('spirals'): typically speakers are not in a position to view or even know all of the relevant stages, as they know only the synchrony of their experience, that is, synchrony and their individual 'extended present'. Admittedly, there can be evidence from apparent time that could point to distinct stages, but directionality cannot always be successfully determined from apparent time.

And the same can be said about the putative unidirectionality of certain developments, a theme well known from the literature on grammaticalization,[28] since in a certain sense, a given change can go in only one direction at a time. That is, for any given change, it can only go (or have gone) in one particular direction, and as such it really only tells us that phenomenon X under conditions Y ended up as altered X′; generalizing from that to all instances of changes that X could undergo is probably unwarranted. It may be useful here to keep in mind the words of early-twentieth-century Canadian humorist Steven Leacock, writing about his character Lord Ronald in his 'Gertrude the governess', a piece in his *Nonsense novels* of 1911 (another of my Canadian mother's

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[27] This is Buckeye football, after all; for anyone who has not experienced this, OSU football is like a religion for many Buckeye fans, and an OSU football fight song is thus like a hymn.

[28] On unidirectionality in grammaticalization, see Haspelmath 1999, 2004, Hopper & Traugott 2003:Ch. 5, and Ziegeler 2003, 2004, among others.

favorite literary images): 'Lord Ronald said nothing; he flung himself from the room, flung himself upon his horse and rode madly off in all directions'.

To shift gears a bit, let me return to Einstein. He also taught us that time is relative, and in a sense, we see the relativity of time in the difference of the view of the linguist versus that of the speaker, as it is a kind of relativizing of the time dimension, relativized to the different perspectives and different sets of tools that are available to linguists and to ordinary speakers, respectively.

And, as an interlude, let me emphasize relativity by turning to another kind of artistic expression, the joke:

> A man asks God 'What is a million years like to you?' and God answers, 'It is like a second,' and then the man asks, 'What is a million dollars like to you?' and God answers, 'It is like a penny, my son.' The man then asks, 'So, God, can I borrow a penny?' and God answers 'Sure, let me get back to you in a second.'

In a similar but more sober vein, the ancient Sanskrit text known as the *Mānava-dharmaśāstra* 'The laws of Manu', in verses 70–72 of chapter 1, gives a definition of a year for Brahma ('the Creator') that illustrates this relativity quite strikingly.

(7) daivikānāṃ   yugānāṃ tu sahasraṃ parisaṃkhyayā
    divine.GEN.PL ages.GEN but 1000   full.enumeration.INS
        brāhmam   ekam ahar jñeyam   tāvatī rātrir eva   ca
        Brahmanic one day to.be.considered so.long night likewise too
    'By a full enumeration, a thousand of divine ages is to be considered as
        one day [= daytime period] for Brahma, and a night likewise too.' (I.72)

By one reckoning, a human year equals one divine day (I.67), and one divine year therefore equals 360 human years; moreover, a divine age equals 12,000 divine years (I.69–70); thus for Brahma the daytime period equals 360 × 12000, or 4,320,000 human years, and the night is similarly 4,320,000 years, so that a total Brahmanic day is 8,640,000 human years![29]

Thus, time and its measure must be treated as relative, quite possibly culturally embedded and culturally relativized. I return to Manu's reckoning of divine time in a second (or two).

3.7. SEVENTH. Another consequence of taking time seriously concerns the notion of stability in language. In particular, taking the long view of time means that the much-discussed issue of 'stability' in language (see most recently Breitbarth et al. 2019) vanishes or at least becomes a very temporally local affair.

My view of stability is that almost everything changes if we wait long enough (again, consider what people say about weather in Ohio—if you don't like it, just wait, as it will change).[30] We can note, moreover, that really all we know about demonstrable language change and putative stability is what we see: a narrow temporal window, c. 10,000 years, out of the much, much longer (c. five to ten times longer, by conservative estimates) time of the total span of human language going back to the origin of language itself deep in human prehistory (see Joseph 2019).

In a sense, then, all of our concern for language over time is really about what elements in a given synchronic state are continuations of material from earlier states, and what elements are innovations, thus showing change.

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[29] The equivalence of human and divine years in the Indian scheme of things is discussed in Burgess 1858.

[30] I say 'almost everything' because the essential building blocks of human language—those principles and features that make human language human language—would not be subject to change without some mutation in what it means to be 'human'.

What we really have, then, is continuity in the face of change, and change in the face of continuity; this is what the time dimension in language (and all of life, for that matter) really means.

4. An extended case study: the greek 'augment'. I turn now to an extended case study showing continuity and change, focusing on the verb in Greek and one particular verbal marking associated with tense, the so-called 'augment'.

4.1. The greek verbal system. In a recent study of the Greek verbal system, Bentein 2019, temporality in the Classical Greek verb is described as follows, a characterization quite similar to that found in various grammatical descriptions of Classical Greek:

> [Greek verbs] can convey temporal deixis through the use of tense, as is the case in many of the world's languages (cf. Levinson 1983: 77, 2004: 114), with the imperfect and aorist conveying events *anterior* to the time of speaking, the present [conveying] events *simultaneous* to the time of speaking, and the future [conveying] events *posterior* to the time of speaking. (Bentein 2019:135)

He notes, however, that this not 100% accurate, because there is 'the use of the future with imperatival meaning, the use of the present with futural meaning, the omnitemporal present, the gnomic aorist [the use of the past tense aorist in timeless statements], etc. (cf. Levinson 2004: 115)'. I return to one of these exceptions by and by.

This view is more or less the standard one, even if it leaves numerous questions still to be asked, and answered, about the origins and structuring of the Greek verbal system. Moreover, there is no shortage of scholarship dealing with this topic, some of it quite recent, such as Willi 2018, De Decker 2018, and Hollenbaugh 2020. Nonetheless, it provides a suitable starting point for a case study about the interplay of continuity and change.

4.2. The augment and its function. Associated with Ancient Greek indicative past-tense categories—the imperfect (essentially, imperfective, the past within the present system), the aorist (essentially, perfective), and the pluperfect (past within the perfect system and thus past completive)[31]—was a marker of past time known in the literature as the 'augment'. This prefix continues a form that can be reconstructed for Proto-Indo-European. It may well have originally been a free word, perhaps a deictic element of some sort or, maybe better, a sentence connective (as in the analysis of Watkins 1964), but for directly reconstructed Proto-Indo-European it was a prefix on the verbal stem; it is attested as such in Indo-Iranian, Greek, and Armenian, but there are also traces in other languages, for example, Albanian (see Hamp 2019) and positive indicators in Anatolian (Hittite and Luvian especially) and Celtic (Old Irish especially) that point to a prefixal augment as part of Proto-Indo-European in the broad sense and not a dialectal feature within the proto-language speech community.

Here is an example of the augment, with segmentation added and this element itself in bold, in the three main branches of the Indo-European family that have an overt manifestation of it from the imperfect of the root *bher- 'carry': Greek **e**-*phere* = Sanskrit **a**-*bharat* = Armenian **e**-*ber*, pointing to a reconstructed form ***e**-bheret 's/he was carrying' for Proto-Indo-European.[32]

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[31] The pluperfect (past of the perfect) is rather rare in Ancient Greek, so my discussion focuses on the imperfect and aorist.

[32] Strictly speaking, in a reconstruction of Proto-Indo-European that recognizes the first (*e*-coloring) laryngeal (*H_1) occurring with what otherwise would appear to be a word-initial *e, the augment should be reconstructed as *H_1e. There is no direct evidence for *H_1 with the augment, and the decision to reconstruct *e or *H_1e depends on whether one believes that there were no 'bare' initial vowels in Proto-Indo-European. Nothing that I say here, however, hinges on whether the reconstruction is taken to be *e or *H_1e.

At the same time, there was a form that looked like a past-tense form in terms of its endings but occurred without the augment. This is the so-called 'injunctive', which was a tenseless form, perhaps better viewed as unspecified for tense (and mood as well), with a few specific functions, especially in prohibitions (with negator *meH$_1$) but also timeless statements (e.g. timeless truths), and in certain conjunction constructions (see Kiparsky 1968, 2005).

As a bit of an aside but one still tied to matters of time, this 'general truth'/'timeless' character of the injunctives is seen in Vedic Sanskrit, in the analysis of Karl Hoffmann (1967), and perhaps can be said to make sense in the context of a culture in which a day for the Creator is equivalent to over 8,000,000 human years; talking about divine events might well call for a verb form that is not rooted in determinable time. In this regard, it is interesting to note that the Iranian counterpart to the Vedic injunctive, namely the unaugmented past-tense forms in Avestan, by contrast, has an entirely different function and does not have the 'timelessness' that the Vedic injunctive does. It rather has a value as a simple past tense in most instances (though also with some modality, for example, with imperatival force). Somewhat speculatively, I would like to point to a possible reason for this difference between Vedic Sanskrit and Avestan regarding the injunctive. The Avesta represent the sacred material of Zoroastrianism, which, significantly I suggest, is a religion that, unlike Hinduism, does not have a chronological cosmogony like that seen in Vedic. Rather, as Violatti (2019) puts it, 'Zoroastrian cosmogony claims that time itself will end after a 12,000 year period … these texts use a mythological chronology based on a Zoroastrian cosmic calendar composed of four world ages, each 3,000 years long'. (See also Bunner 2006.) Zoroastrian time, as the background to the content of the Avesta, thus is nothing at all like that of Hinduism, as revealed in the content of the Sanskrit Laws of Manu. That is, I speculate that the difference between the Vedic use of the injunctive and the Avestan use of the injunctive is tied to an entirely different religio-cultural milieu in which the languages were used.

To return to Greek, it can be assumed that Greek inherited the Proto-Indo-European distinction, seen in Vedic, between tensed indicative augmented forms and untensed forms without the augment. Recall now the 'gnomic aorist' described above, the use of augmented forms in Greek in the statement of 'general truths and descriptions of habits'. Such a usage might seem anomalous at first, and certainly is unexpected if the augment is associated specifically with past time. However, it makes sense in the context of an original distinction between unaugmented forms that are timeless and augmented forms that are tensed. That is, the timeless injunctive may well be the source of the 'gnomic aorist'; once the unaugmented forms receded, their functions could have been taken over in part by their closest neighbors, namely, the similar forms that differed only in having the augment.

4.3. THE REALIZATION OF THE AUGMENT FROM ANCIENT GREEK TO MODERN GREEK. With this Indo-European background to the augment, we can now trace the history of this element within Greek, examining its properties at different chronological stages of the language.

THE AUGMENT IN ANCIENT GREEK. The augment is realized formally in Greek in several ways. Mostly it occurs as an obligatory marker of the indicative past-tense categories and therefore is to be considered part of the morphological makeup of these categories. With consonant-initial verbs, it is realized as a prefix *e-* attached to the verb, as with *phérō* 'I carry' (present) – *épheron* 'I was carrying' (imperfect); this realization is known as the 'syllabic augment'. With vowel-initial verbs, the augment is realized

via the lengthening of an initial vowel, as with *ethélō* 'I am willing' (present) – *ḗthelon* 'I was willing' (imperfect) or *agorázō* 'I buy' – *ēgórazon* 'I was buying'; this realization is known as the 'temporal augment'.

The augment is found in the earliest attested Greek, namely Mycenaean Greek of the fourteenth century BC, most notably in the form[33] *a-pe-do-ke* 'he gave back' (where the first -*e*- is the augment, thus as if *apédoke*) and perhaps one or two other forms. Mostly, though, in Mycenaean Greek, to the extent that there are true simple past-tense forms, there is no augment (as also, largely, in Avestan, as noted above).

 (8) a. *a-pu-do-ke* (as if *apúdoke*, an unaugmented form corresponding to *apé-doke*)
   b. *wi-de* 'he knew' (as if *wíde*)
   c. *te-ke* 'he placed' (as if *thḗke*)

Such forms are consistent with the idea that the absence of the augment was a matter of the loss of an independent function for the augmentless injunctive. This situation is seen also in later, but still early, Greek, specifically in Homeric epic, that is, the *Iliad* and the *Odyssey*, of the eighth century BC, in the Homeric Hymns (variably dated but mostly early, c. seventh century BC), and also in the poetry of Hesiod (eighth to seventh centuries BC) and Pindar (sixth to fifth centuries BC). It is generally held that these unaugmented apparent past-tense forms continue in a functionally transformed way the Proto-Indo-European (augmentless) injunctive, although it has long been suspected that

FIGURE 8. 'The girl with a pearl earring' (part of Mauritshuis collection, The Hague).

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[33] Following the usual Mycenological practice, I transcribe Mycenaean Greek forms via a representation of the syllabic signs of the Linear B writing system and give an interpretation of the form in a transliterated version as if it (anachronistically) were to be written in the Greek alphabet.

the different metrical shape of the augmented versus unaugmented forms (e.g. in terms of syllable count) may have played a role in their use in poetry. But there are indications of other functions associated with the augment that are more pragmatic in nature: De Decker 2018, for instance, has argued that the difference between augmented *éeipe* and unaugmented *eîpe* for 'he said' in Homeric epic and early poetry was tied to evidentiality, with the augment serving 'as a grammatical marker of visual evidentiality',[34] and Wolfe 2017 has found that at least in Book 1 of the *Iliad*, unaugmented forms occur more frequently in narrative than in direct speech. So in early Greek, the augment appears to be optional, from a formal standpoint, though possibly controlled in part by meter and in part by more nuanced semantic and pragmatic concerns.

Still, by Classical Greek of the mid fifth century BC, from a purely formal standpoint, the augment is generally obligatory in marking past tense. Nonetheless, there are some exceptions to this general statement about the augment, besides the gnomic aorist, which has the form of the past tense but not the function, as well as some oddities about augmentation of verb forms.

First, there are some legitimate past-tense forms that are lacking the augment that occur in classical Attic Greek prose; this is especially the case with verbs that begin with a diphthong (van Emde Boas et al. 2019:§11.41). For many such verbs, there is variation between augmented and unaugmented verbs, as with *eúkhomai* 'wish', with unaugmented imperfect *eúkheto* 's/he wished' versus augmented *ēúkheto* (with the lengthening of an initial vowel, i.e. the temporal augment), or *heurískō* 'find', with unaugmented aorist *heuréthēn* 'I found' versus augmented *hēuréthēn* (also with the temporal augment). Some verbs, however, show no variation and have only unaugmented forms, such as *outázō* 'stab', with imperfect *oútazon* 'I was stabbing'.

Second, there are some forms that have multiple augments, such as *ēneskhómēn* 'I endured',[35] the aorist middle-voice form of the verb *anékhō*, composed of the preverb *ana-* and the verb *ékhō* 'have'; here there is both the aorist of the verbal base with the syllabic augment, *eskhómēn*, and temporal augment lengthening of the preverb (*ē* being the lengthened form of *a*). The imperfect *ēneikhómēn* also occurs, with the temporal augment giving *ēn-* and the result of the syllabic augment prefixed to *ékhō* giving *-ei-* (from /e-ekh-/). Interestingly, Schwyzer (1950:656) suggests such forms are due to an 'Unsicherheit des Sprachgefühls' ('insecurity in language sensibility'), suggesting a tension between treating the verb as a composite, and thus subject to influence from the base verb *ékhō* and its past-tense forms (1SG imperfect *eîkhon*, aorist *éskhon*), and treating it as having no internal morphemic structure, as if an unsegmentable *anekh-* were the root.[36]

Third, the general rule governing the occurrence of the temporal augment, distinguishing between vowel-initial verbs that show the augment by lengthening the vowel and consonant-initial verbs that show the augment with the *e-* prefix, has some exceptions. These exceptions resulted from the analogical spread of the temporal augment (lengthening) to verbs where the syllabic augment—the prefix *e-*—would be expected.

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[34] See also De Decker 2016, among several other works of his on the augment.

[35] I thank Dr. Chiara Zanchi, of the Università di Pavia, for bringing this form to my attention.

[36] In the usual case (and see below regarding *kathízō* 'sit (down)'), preverbs such as *ana-* usually were outside of augmentation, as if attached to the root after the augment was positioned. Verbs that show internal composition with other elements, generally derived from compound nouns or adjectives, for example, *dustukhéō* 'be unfortunate', with the adverbial prefix *dus-* 'un-, mis-' (cf. *dústukhos* 'unfortunate'), or *stratēgéō* 'be a general' (cf. *stratēgós* 'general', from *strato-* 'army' + *ágō* 'lead'), have the augment as the leftmost element, as in aorist *edustúkhēsa* 'I was unfortunate', *estratḗgēsa* 'I was a general'.

In particular, the verbs *boulomai* 'want', *dúnamai* 'be able', and *méllō* 'be about to' have respective past tenses *ēboulómēn*, *ēdunámēn*, and *ḗmellon*, as if the present-tense forms of these verbs were, contrary to fact, *e-boúlomai* (or *a-boúlomai*), *e-dúnamai* (or *a-dúnamai*), and *e-méllō* (or *a-méllō*), respectively (van Emde Boas et al. 2019:§11.41). Although the chronology of the appearance of these innovative forms is somewhat tricky, a plausible explanation here is that first *boúlomai* was affected analogically by synonymous verb *ethélō* 'be willing', and then, based on the modal nature of the semantics of all of these verbs, the other two were drawn into this innovative use of a lengthened augment.

Fourth, there are augments that show up in unexpected positions, yielding in some instances a kind of double augment (van Emde Boas et al. 2019:§11.57–58). That is, in the usual case, the augment is positioned immediately to the left of the verbal root, and any other adverb-like prefixes, so-called 'preverbs', appear to the left of the augment (see n. 36); moreover, in the usual case, the accent in past-tense forms is retracted to the left but does not go farther left than the augment. The verb for 'sit down', *kathízō*, offers an illustration of this positioning, as well as an interestingly variable set of past-tense forms.

There are three attested imperfect past-tense forms, meaning 'I was sitting (down)': *kathîzon* (*î* = [ī], with a circumflex accent),[37] *káthizon*, and *ekáthizon*. The string *kathiz-* is from a preverbal content prefix *kata-* 'down' with a root *híz-* (from *si-sd-, reduplicated present tense of root *sed- 'sit'). Of these forms, the etymologically correct (prior) one is *kathîzon*, where *î* represents augmentation via lengthening (temporal augment) and there is no accent retraction farther left than the augment vowel. The variant form *káthizon* shows the effects of a reanalysis whereby the accentuation is as if *kath-* is part of the root, not a preverb (see n. 36) and there is no overt augment, with past tense being marked in this case via lengthening of the vowel, assuming <i> here stands here for [ī]. Finally, the further variant *ekáthizon* shows the effects of a second reanalysis in that the form is regularized via an overt syllabic augment *e-* (with the lengthening of the temporal augment overlooked), with that *e-* positioned as if *kath-* is part of the root, and not a preverb.

Fifth, there is an anomalous case in which the otherwise verbal augment turns up on an original noun, giving what is essentially, from an etymological standpoint at least, a double augment. This occurs with the form *ekhrễn* versus the variant *khrễn* 'it was necessary' (van Emde Boas et al. 2019:§11.41). That is, *khrễn* is from a univerbation (contraction) of the noun *khrḗ* 'necessity' and *ēn* '(there) was' (deriving from *e-H₁s-, where *e- is the augment and *H₁(e)s- is the root 'be'); thus, *khrễn* is the older form, with the augment built into the -*ē*- of *ễn*. The later variant *ekhrễn* shows the effects of speakers taking the univerbation seriously so that the anomaly of the absence of an overt augment on a form that functions as a verbal predicate is resolved by the affixation of the syllabic augment. What this means, however, is that *khrḗ*, a noun, was taken (i.e. (re)analyzed) as a (verbal) host for the augment, and the ultimate form, *ekhrễn*, has two augments from an etymological point of view, one of which attaches to an ostensible noun.

Thus, overall, these various exceptions and anomalies demonstrate that the Ancient Greek augment, while fairly regular as to its realization in terms of form and position,

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[37] There are two relevant accentual facts here: the circumflex accent could fall only on long vowels, and accent placement in the past tense is said to have been 'recessive', positioned as far to the left as a three-mora law of limitation and other constraints like that involving the augment (see below) allow for.

nonetheless shows some 'rough edges', so to speak. This fact takes on a particular significance when the later history of the augment in Modern Greek, as well as Medieval Greek, is considered.

THE AUGMENT IN MODERN GREEK. I now fast-forward to Modern Greek and survey what is found regarding the augment 2,500 years later. The situation with the augment is certainly different in detail from that found in Ancient Greek, but importantly, overall the same general shape to the situation can be discerned.

In particular, the augment is still hanging on productively. Everywhere that it occurs, it is still a prefix and mostly still *e-*. One key difference is that in Standard Modern Greek (SMG), the presence of the augment is phonologically determined, occurring only when stressed, for example, *é-fera* 'I was carrying' but *férame* 'we were carrying', continuing Ancient Greek *épheron/ephéromen*).[38]

The augment is realized in regional dialects to a far greater degree than in the standard language, and it occurs even when unstressed, as in Ancient Greek. For instance, from the Greek of southern Albania, where I have been doing fieldwork in Greek-speaking villages and enclaves over the past decade, forms such as the following occur, all with unaccented augments.

(9) a. *eskéftike* 's/he thought' (versus SMG *skéftike*)
   b. *eðúleve* 's/he was working' (versus SMG *ðúleve*)
   c. *espuðázane* 'they were studying' (versus SMG *spúðazan/spuðázane*)

Similar forms can be cited from other regional dialects, for example, Cypriot Greek *efilúsamen* 'we were kissing' (versus standard Greek *filúsame*).

The modern situation with the augment becomes even more interesting when one considers the various 'rough edges' found all around contemporary Greek, including the standard language; that is, one finds a number of linguistically interesting innovations regarding the formal side of the augment that are not unlike those that occur in Ancient Greek, though perhaps even more abundant.

First, instead of *e-* as the form of the augment, continuing the Ancient Greek syllabic augment, there is the spread of *i-* as the augment, continuing the *ē-* of the Ancient Greek temporal augment. Such forms are parallel to forms like *ēboulómēn* in Ancient Greek noted above. Examples from the Greek of southern Albania include *íferan* 'they carried' (versus SMG *éferan*). Such *i*-augments do occur occasionally in the standard modern language, for example, *ípja* 'I drank' (versus Ancient Greek *épion*), aorist past of the verb *pínō*; the *i-* of the Modern Greek form is unexpected compared to Ancient Greek and anomalous synchronically, but is now a standard form;[39] but in standard Greek, however, *i-* does not occur with the verb *fer-* 'carry', so the regional dialects show a greater range of the spread of *i-* as the augment.

Second, there is more evidence of reanalysis with preverbs, leading to augments that are 'misplaced' from an etymological standpoint. For instance, there is the Modern Greek form *eprókito* 'it was a matter of', admittedly a borrowing into colloquial usage from katharevousa Greek, the high-style archaizing variety of the language, but a mod-

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[38] Based on speakers with this distribution of the augment, Janda and Joseph (1988) argue that it represents a case of movement from a morphologically determined element in Ancient Greek to this phonologically determined element in Modern Greek, a development that is rare compared to the widely instantiated movement from a phonologically determined element to a morphologically determined one (as with umlaut in German and across all of Germanic, or with consonant mutations in Celtic).

[39] For some reason, in standard Greek, the *i-* augment with *píno* 'drink' occurs only in the aorist, not the imperfect past, which is *épina* (continuing Ancient Greek *épinon*).

ern form nonetheless that is used by speakers of the standard language. This form de-rives from the preverb *pro-* plus the root *ki-* and a personal ending *-to*, but the preverbal prefix plus root is treated as a new root and thus has the augment outside of (to the left of) the preverb; this is unlike Ancient Greek, where the augment was inside of (to the right of) the preverb with this very verb, where *-ou-* is the outcome of the contraction of *-o-* and *-e-*.

(10) a. Modern Greek *eprókito < e-pró-kito* (= augment – preverb – root + ending)
     b. Ancient Greek *proúkeito < pro-é-keito* (= preverb – augment – root + end-ing)

This reanalyzed form is thus rather like Ancient Greek *ekáthizon*, discussed in §4.2.

Third, in various modern forms, a vowel occurs that continues the ancient augment formally, thus *-e-*, but without an augment-like past-marking function. That is, original augments have come to be embedded in verb forms as if they are just part of the root; for instance, one finds the following.

(11) a. *katevázo* 'put down, download', where *kate-* is the preverb, instead of the more usual form *kata-* (cf. *kata-yráfo* 'register, make a list, write down'), and the usual form of the root verb is *vázo*.
     b. *anevéno* 'go up', where *ane-* is the preverb, instead of the more usual form *ana-* (cf. *ana-timó* 'mark up (a price)'), and the usual form of the root verb is *véno*.

In such forms, the *-e-* in the present stem comes from the past-tense forms such as *katévaza* 'I was putting down' and *anévika* 'I went up' where the *-e-* is the past-tense augment, decoupled from the past tense and generalized into the present stem. Thus these vowels are diachronic (i.e. etymological) augment vowels that are synchronic nonaugment vowels, being semantically and morphologically empty.

Fourth, in regional dialects forms with multiple augments occur. For instance, in the Greek of southern Albania and elsewhere, the past tense of *pá(γ)o* 'I go' is *epíγa* 'I went'. This past form derives from earlier Greek *hup-ễga*, the past tense of present tense *hup-ágō*, the source of *pá(γ)o*; in *hupễga*, the *-ē-* contains the augment (the temporal aug-ment), positioned to the right of the preverb *hup-*, so that the earlier form consists of preverb – augment + root + ending. By regular sound changes, *hupēga* developed into *píγa*, the form found in SMG; since this dialect is one in which unstressed augments can occur (see 9 above), it can be overtly marked as a past tense with an augment, giving *epíγa*. This modern dialectal form thus contains the sequence augment – preverb – aug-ment + root – ending, as with the Ancient Greek forms such as *ēneskhómēn/ēneikhómēn* discussed in §4.3. Given that it occurs in a regional dialect and is lexically restricted, one might argue that Schwyzer's appeal to 'insecurity' may be valid here, in that the tempo-ral augment is somewhat hidden in the middle of the form. However, in other varieties of Greek, such an account cannot work.

In particular, as discussed in Pavlou 2018:57–88, in Cypriot, multiple augments occur quite productively with compound verbs, those with contentful first-member ele-ments. Given their productivity, such forms cannot be a matter of 'insecurity'. An ex-ample of such a compound verb is *misopsíno* 'I half-cook', from *miso-* 'half' + *psíno* 'cook'. The past tense of these compound verbs has the augment to the left of the com-pound element, for example, *e-misópsisa* 'I half-cooked', but interestingly, one can also find *e-miso-é-psisa*, with two augments (note that **miso-e-psisa* is not possible), and with two prefix-like elements, three augments are possible: *e-ksana-e-para-é-psisa* 'I overcooked it again' (with the prefixal elements *ksana-* 'again' and *para-* 'over-').

THE AUGMENT IN MEDIEVAL GREEK. The many innovations noted above for Modern Greek—the various unusual realizations of the augment—are found throughout Medieval Greek as well. Without going into details here, it is enough to refer to the extensive documentation of the augment in Medieval and early Modern Greek in Holton et al. 2019:1394–1433, and to point to such well-instantiated Medieval phenomena as absence of the augment (e.g. *aɣórasen* 'he bought' (fourteenth century); cf. Ancient Greek *ēgórasen*), the spread of the temporal augment (e.g. *ívales* 'you did put' (fifteenth to sixteenth centuries); cf. Ancient Greek *ébales*), double augments (e.g. *eproédosa* 'I gave up' (fourteenth century); cf. Ancient Greek *proédōka*), and external augments with prefixed verbs (e.g. *eparakalésasin* 'they invited' (fifteenth century); cf. Ancient Greek *parekálesan*),[40] among other innovative aspects of augmentation in Greek. Some of these innovations have deeper historical roots—*ífera* 'I brought' (Ancient Greek *épheron*; cf. *íferan* from southern Albania Greek cited above) occurs as early as the third or fourth century AD, that is, post-Classical but not Medieval Greek—but some are Medieval innovations. In either case, they demonstrate both continuity with the augment and change in its realization.

4.4. SUMMATION REGARDING THE AUGMENT. In assessing the state of affairs with the augment over the span of Greek, including its prehistory between Proto-Indo-European and attested Greek, it is instructive to compare the Modern Greek situation to other modern Indo-European languages. As noted earlier, the augment is not found in many branches of the family and is most evident in the earlier stages of those branches that do show it. Nonetheless, it does occur in Armenian, where we find, for example, *e-ber* '(s)he carried' with the augment *e-*. However, in Armenian, the augment occurs only on what would otherwise be a monosyllabic past tense, thus only with the third-person singular form but not with the first-person singular *beri* 'I carried' or the second-person singular *berer* 'you carried'. And while it does occur in modern Iranian languages, such as Yaghnobi, where the augment is an obligatory part of the morphological structure of the verb (as in Proto-Indo-European and Ancient Greek), for example, *apursóšt* 'he asked' (past of *pursak* 'ask'), the form of the augment is different, with *a-* rather than *e-* (reflecting an early Indo-Iranian sound change of *e > a*).

Thus it is fair to say that in Greek alone of all the Indo-European languages we see the most enduring augmentation in terms of both form and function, thus giving an element with considerable continuity; the *é-* of Modern Greek *éfera* 'I brought' is actually pretty much as it was 6,500 years ago in Proto-Indo-European.[41] Still, this continuity comes with considerable change as well, for example, to the SMG phonologically determined situation, to the triple augment Cypriot situation, and so forth. And even the apparent oddities in augmentation—the various innovations that are at odds with the ancient situation—continue, such as the doubly augmented forms like *epíɣa* and the spread of the temporal augment, among other innovations, though not necessarily with direct lineal continuity from ancient forms through Medieval Greek and into Modern Greek.

The situation with the augment can be summarized via the following questions and answers:

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[40] There are even some examples rather like the Cypriot multiple augmentation in compound verbs, cited in §4.3; *eprotoevɣale* 'he first took out', a compound with *proto-* 'first', occurs in an eighteenth-century translation of Don Quixote.

[41] Admittedly, there is no trace in Greek of the initial laryngeal consonant (the *H_1 of the reconstruction; see n. 32), but neither is there any trace in Armenian or Yaghnobi.

- Is there continuity with the augment? Yes! Its form and function are more or less the same now as in the deep past.
- Is there stability with the augment? Yes! Especially in dialects where it is (still) an obligatory part of past-tense forms.
- Is there change with the augment? Yes, indeed! While similar to its ancient predecessor, it is not completely identical in all respects in form or function.
- Is there instability with the augment? Yes! It has been subject to all kinds of re-analyses and innovative developments (changes).

Thus what we have here is a dramatic instance of continuity and change all wrapped up in a single mono-phonematic monosyllabic prefix. The augment therefore serves as a powerful case study illustrating the tension in language between continuity and change, between stability and instability, between linguistic conservation and linguistic innovation.

There is an important moral here for historical linguistics. On the face of it, the augment might well be viewed as having a certain fragility, inasmuch as it is a single vowel, often unaccented, occurring at the edge of a word, an element that was lost in most branches of the Indo-European family. It might very well be thought of, therefore, as a likely target for deletion. Despite this potential for loss, the augment remains in Greek and is still a key part of Greek verbal morphology to this very day, having persisted over the roughly 3,500 years of the history of Greek (Mycenaean Greek up to the present) and having made it into attested Greek after some 3,000 years of development beyond the breakup of Proto-Indo-European. The fact that a likely target for elimination has nonetheless survived and remains robust after some 6,500 years of diachrony should be a cautionary tale for historical linguists, as it means that it can be difficult to predict what is going to happen diachronically with any given element in a given language at a given time; indeed, the circumstances in a given language may not be fully replicable in all languages, making any predictions perhaps even impossible.[42] We can certainly look for generalizable trends and principles guiding language change, but we should not be surprised when each language we examine shows its own peculiarities of development.

5. Toward a conclusion. Let me move in the direction now of wrapping up. But like Nietzsche's philologist, I do so slowly.[43]

5.1. Part I: personal diachrony. Since I have been talking about the relevance of time, I feel I should give something of a diachrony of the field, and especially the way we have built on the results of previous research—it is what makes linguistics a science, a cumulative effort. That would be what we can informally describe as 'a whole nother talk',[44] a lengthy one to be sure, so I do not indulge myself in that direction here, at least not fully so.

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[42] Though see Janda 2020 for thirty specific predictions about particular changes under way in English today and how they might be resolved in the next eighty years.

[43] I am referring here to the statement from Nietzsche 1881 (from Hollindale's translation, 1997:5): 'perhaps one is a philologist still—that is a teacher of slow reading' (in the original ' … ein Lehrer des langsamen Lesens'). I heard this very apt characterization from Calvert Watkins, in a slightly altered form, as 'Philology is the art of reading slowly'. As I learned from Michael Silverstein (and see also Jasanoff & Joseph 2015 on this), this particular formulation came from Roman Jakobson, from whom Watkins adopted it, ultimately taking it to heart and passing it on to students of his.

[44] As long as claims about unidirectionality in grammaticalization have been discussed (see n. 28), I feel licensed to refer here to Joseph 2011 for a discussion of this particular phrase as a counterexample to a putative principle of unidirectionality

But there is also a personal diachrony that I can, and should, say something about. In fact, I would be remiss if I left this forum without mentioning the remarkable teachers, mentors, and scholars I have had interactions with over the years, and this in turn does give a glimpse into the history of the field as it has affected me and my development.

Doing historical linguistics, especially Indo-European linguistics, and working primarily on a language like Greek, with a long history of scholarship devoted to it, it is almost impossible not to get the sense of standing on the shoulders of giants. For me, these giants have not been just the amazing scholars of the nineteenth and twentieth centuries whose works I read and have drawn on but also all the ones who most intimately affected me directly.

I want not only to thank my teachers but also to note, without wanting to sound boastful, that the more I have learned over the forty-five-plus years since my graduate studies at Harvard, the more I have come to appreciate the remarkable scholarly tradition that I was fortunate enough to be plugged into. There are several key strands to my educational genealogy:

- With regard to historical linguistics in general and to Indo-European linguistics more specifically, the following generational chain of teachers to students leads from Ferdinand de Saussure to me:[45] Ferdinand de Saussure > Antoine Meillet > Emile Benveniste > Calvert Watkins (via his attendance at Benveniste's Paris lectures in 1950s) (> Jay Jasanoff) > me > … .
- In addition, in this domain, there have been a few key lateral influences, especially Jochem Schindler (more on him below) and Jay Jasanoff (also part of the direct lineage above), but also Eric Hamp.
- And, with regard to Sanskrit, there is the following chain from William Dwight Whitney to me (and beyond): William Dwight Whitney > Charles Lanman > Walter Eugene Clark > Daniel Ingalls > me > … ,
- which was crossed with a specifically European one: Wilhelm Brandenstein > Manfred Mayrhofer > Jochem Schindler > me > … .
- Also, though, to the extent that my work has had a theoretical orientation and has made some contributions in that sphere, I have to acknowledge the input of my professors in that realm (listed here in alphabetical order): Judith Aissen, Jorge Hankamer, Susumu Kuno, David Perlmutter, Haj Ross.

Moreover, all of these professors, in historical linguistics and in linguistic theory, were also fantastic teachers; Calvert Watkins's lectures, for instance, were masterpieces of artistic proportions, Jay Jasanoff and Jochem Schindler had a thoroughness to their command and presentation of relevant data that was awe-inspiring, and no one could teach syntactic argumentation better than David Perlmutter, unless it was Judith Aissen or Jorge Hankamer, who learned their style of teaching from David!

And in a small way, I feel that the contribution these remarkable linguists made to my development as a teacher has been a part of my—and therefore their—legacy, as four of my advisees have won teaching awards at their respective institutions (in chronological order of their award): Rex Wallace, at the University of Massachusetts, Amherst; Salena Sampson Anderson, at Valparaiso University; Hope Dawson, at The Ohio State University; and Panayiotis Pappas, at Simon Fraser University.

I also have to acknowledge here that I have learned from all of the scholars with whom I have worked on papers and books and presentations and such; the most notable

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[45] And naturally, from me to my own students and to their students.

of these collaborators are, in alphabetical order: Christopher Brown, Hope Dawson, Victor Friedman, Hans Henrich Hock, Rich Janda, Paul Postal, and Rex Wallace. I must also mention here two colleagues whose contribution to my intellectual development was great: OSU colleague Arnold Zwicky, for many reasons but especially due to his work on clitics, which had a profound impact on my investigations of the Modern Greek verbal complex (see e.g. Joseph 1988, 1990, 2002), and my now-late University of Chicago colleague Michael Silverstein, who sadly passed away while I was working on this article (July 17, 2020), due to his deep knowledge of the history of our field and all that I learned about that from my interactions with him.

And, though they are too numerous to mention individually, I should also thank my many students, undergraduate and graduate alike, throughout my career, for all that I have learned from them through their questions about, comments on, and challenges to pronouncements I have made in classes and in meetings over the years. Their input is a reminder of why teaching is such a rewarding profession.

I have also learned from the literally hundreds of language consultants who have worked with me over the years; they are too numerous to mention individually but they have contributed mightily to my development as a linguist, offering me their insights in Greek especially but also Albanian and Lithuanian, and, at the end of the year of indigenous languages, let me acknowledge as well my Cree consultants from Alberta during my postdoctoral year at the University of Alberta in 1978–1979.

And, as long as I am mentioning 'enablers' (as it were) of my research, let me give a shout-out to my family, my wife and kids (Mary Clark, David Clark-Joseph, Adam Clark-Joseph) and my siblings (Alan and Leila) and my parents (Professor Harriet Joseph and Dr. Edward D. Joseph, also a professor and himself a president of two of his professional organizations in Psychiatry and Psychoanalysis).

5.2. PART II: PRIVILEGE AND HUMANISTIC RESEARCH. Finally, I would like to mention a further detail about my life and about what that detail means. I am the first to admit that I have enjoyed a life of privilege, growing up as an upper-middle-class white male (admittedly as a Jewish white male, but white and male nonetheless). However, the real privilege that I would like to remark on here is how much of a privilege—with the word understood in a somewhat different sense—it has been to be able to spend my life studying something as interesting as the way languages, and especially the Indo-European languages and most particularly the Greek language, have changed over time.[46] This latter type of privilege is inclusive, something that all of us in the LSA take part in and share in, inasmuch as we all spend our time studying what we love and adding to the great store of human knowledge through our experimentation, our reading of texts, our examination of corpora, our interviewing of speakers, our determination of etymologies, our codifying of research into articles and books, our sharing of research results with others, and so on, that is, by engaging in the humanistic and scientific enterprise of linguistic research.

I say this proudly and wear this particular privilege proudly, as I feel we all should, and I proclaim, for all both within the academy and outside of the academy to hear, that what we do as humanistic scientists, applying scientific methodology to the examination of a uniquely humanistic phenomenon, namely human language in all of its many

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[46] In emphasizing this other sense of 'privilege' here, I do not mean to belittle or ignore in any way the very real ways in which the privileges accorded me by virtue of my white male upper-middle-class status have contributed to my ability to share in this other sense.

dimensions, IS important and IS worthy of the support of the academy and of society at large. It is my firm belief that while our research, and indeed all humanistic research, may not extend life (as, say, medical research does), it enhances life, and it is fair to ask whether life without enhancement, without the enjoyment that the arts and humanities bring, is worth extending. So I close with this plea, admittedly preaching to the choir, offering a justification for what we as humanists in a broad sense do.

When Antonio Cassesse, the Italian prosecutor in the Yugoslav War Crimes Tribunal in The Hague arising out of the Balkan wars of the 1990s, would take a break from the angst and horror of the courtroom, with the testimony about mass killings and torture and other unspeakable acts that nonetheless were being spoken about and unfortunately did happen, he would restore his soul by going across town to the Mauritshuis museum in order to, in his words, 'spend a little time with the Vermeers', that is, to look at some paintings by Johannes Vermeer, one of the greatest of the great masters of the Dutch Baroque period; seeing the sublime beauty of Vermeer's paintings, such as 'The girl with a pearl earring' (1665; Figure 8, p. 924 above), with its delicate lines and their 'peacefulness and serenity' (to use the characterization of Weschler 1995 in his account of Cassesse and the Tribunal), essentially reminded Cassesse of the good that humans can do.

Thus in a curious way, the arts and humanities can offer relief from humanity—that is what I mean by saying that they enhance our existence. That is why I say that the humanities may not extend life, but the humanities enhance life, and why I ask what life would be like without the humanities, without humanistic enterprises like the field of linguistics. To be honest, I shudder to think. Indeed, research into the history of languages offers a window into what unites us as humans—and I would like to give a few examples of what I mean by this.

First, we read in the Rigveda, as Wendy Doniger puts it in her introduction to her translations of Vedic hymns (Doniger 2005:17), all about 'conflict within the nuclear family and uneasiness about the mystery of birth from male and female parents; the preciousness of animals … ; the wish for knowledge, inspiration, long life, and immortality'. In many ways, these seem to be universal human concerns, and such a characterization of content could be applied to what one sees today in the tabloid press (such as the *National Enquirer* in the US) or in titles on bestseller lists or on various websites and social media posts.

Second, the same sentiment comes out of a look at Assyrian, a language that was spoken, and written down, some 3,000 years ago, and yet still speaks to us today. The Chicago Assyrian Dictionary project was started in 1921 and finally completed in June 2011, so it shows real scholarly perseverance. Some of the descriptions in the media about the project reveal the same sort of sentiment that Doniger stated about the Rigveda. The *Denver Post*, for instance, reported that the texts express 'joy, anxiety and disappointment about the same events [that provoke us] today: a child's birth, bad harvests, money troubles, boastful leaders'.[47] And Matthew Stolper, a University of Chicago professor associated with the project for thirty years, described the contents of the Assyrian cuneiform texts as follows:

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[47] See https://www.denverpost.com/2011/06/04/dictionary-of-assyrian-language-finished-after-90-years/, from June 4, 2011 (last accessed August 24, 2020), with similar accounts in a number of news outlets that same day. This is also the source of Professor Stolper's remarks that follow.

> A lot of what you see is absolutely recognizable—people expressing fear and anger, expressing love, asking for love … . There are inscriptions from kings that tell you how great they are, and inscriptions from others who tell you those guys weren't so great. … There's also a lot of ancient versions of 'your check is in the mail.' And there's a common phrase in old Babylonian letters that literally means 'don't worry about a thing.'

Finally, there is an example from the work of Craig Melchert, with whom I had the pleasure of being in graduate school in the mid-1970s. In Melchert 1991, he wrote on the last minutes of life of the Hittite king Ḫattušili (from the second millennium BC—the Hittites commanded a vast empire then in what is now central Anatolia, in present-day Turkey). Here are the relevant facts as Melchert lays them out: Ḫattušili was apparently dictating his last will and testament to a scribe when he suffered an ultimately fatal or near-fatal episode as he finished the official dictation at the end. He then began reflecting somewhat incoherently about his impending death, producing ravings that were dutifully copied down and recorded for posterity by the scribe.[48] Ḫattušili ends with an exhortation to a woman he has been calling for: 'Protect me on your bosom from the earth', apparently his real last words. Melchert (1991:186) interprets these last words as follows: it is known that the Hittites practiced burial (not cremation) but believed in an afterlife and immortality in divine form for its kings; thus, he writes:

> Despite … assurances of happy immortality … the dying Ḫattušili is frightened. He sees only the immediate certainty that he will soon be put down into the cold, dark earth alone, and like many a poor mortal since he finds this a terrifying prospect.

Further, by way of linking modern-day folks with those that preceded them 3,500 years ago, Melchert says, with real eloquence:

> there seems to be little fundamental difference between us and ancient peoples when it comes to facing death. Ḫattušili's words speak to us directly across the centuries. His fear is palpable. We not only at once understand but also are moved by his agony and his desperate cry for his loved one's tender comfort. These emotions are neither Hittite nor Indo-European, neither ancient nor modern, but simply human.

6. CONCLUSION. Using observations such as these, which can be multiplied across all of the ancient languages[49] we deal with, I would like to suggest that, along with the LINGUISTIC UNIFORMITARIANISM that Labov and his school have exploited so dramatically to use the present to learn about the past, modeled to some extent on the GEOLOGICAL uniformitarianism of Charles Lyell in the nineteenth century, we can recognize a HUMANISTIC uniformitarianism that the study of ancient texts gives us, emphasizing the view we get of how much we as humans today are like humans in the past in terms of our concerns and our needs, and, in essence, our shared humanity.

Thus language and linguistics, and to a large extent, historical linguistics, offer us ways of understanding our humanity. I close with this great quote from Jim McCawley, one of my predecessors at this podium, from 1996:[50]

> Languages are weird and wonderful things. As long as you are perceptive enough there is plenty to keep you happy and busy.

So let's all stay busy and let's all stay happy!

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[48] Note that this is presumably the closest we will ever come to having a tape recording of spontaneous speech from the second millennium BC.

[49] And modern languages too, of course, though my point here is focused on the diachronic dimension.

[50] I know this quote from the 1999 Linguistic Institute official t-shirt, which was emblazoned with this very apt saying.

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