The International Auxiliary Language and Multilingualism: Symbiosis and Synergy.

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Language policy, multilingualism, and protection of minority languages have all become increasingly important linguistic research topics. This essay introduces a novel concept potentially useful to educators, researchers, policy makers and others concerned with these issues: that a carefully planned process for co-evolving an International Auxiliary Language (IAL) can encourage multilingualism, promote minority language preservation, and help to define pragmatic language policies in a rapidly-changing world. Combining native language education and IAL education might free two birds from one cage, slowing or even reversing the current trend toward minoritylanguage extinction, while co-evolving a very rich global second language.

The appeal of an IAL has long been clear: even an expert polyglot can master no more than a tiny fraction of the thousands of languages and dialects on offer. Equally clear is that constructed languages such as Esperanto have failed to produce an IAL. Less obvious is that the current status of multilingualism, which amounts to a free market in languages, has proven inimical to linguistic diversity. Presented with alternative languages, most people have naturally chosen the most popular, so as to access the greatest amount of knowledge and maximize commercial and educational possibilities for themselves and their children. As a result, over half the world's population has come to speak one of fifteen major languages, and many minority ethnic tongues are close to extinction.

This trend has been apparent for a long time, and one response has been the attempt to

preserve threatened languages via state subsidy. Unfortunately, this approach has had poor results. This is due at least in part to real-world choices people must make in order to make a living and get an education. Many retain an intense attachment to their ethnic origins and languages, and may therefore welcome preservation of their indigenous languages - but not to the extent of being cut off from the wider world and the concomitant opportunities for education, employment, and social advancement.

For these reasons, there are several apparent advantages to combining minority language documentation and literacy education with IAL education based on some form of basic English. English already functions in a pre-eminent global lingua franca role. Among academics, the growing interest in and acceptance of English as a Lingua Franca (ELF) is a reflection of this reality. Although some other modified natural root language could be substituted for an Englishbased IAL scaffolding, learners would then lose the advantage of a springboard to higher-register English skills. The pursuit of ELF proficiency has a powerful attraction to many educators and learners worldwide, whereas some other IAL root language might elicit indifference. With this idea in mind, this essay proposes a simplified and regularized English basis for IAL co-evolution. Teaching such basilect English using the latest, most expeditious educational methods would introduce an easily learned scaffolding for further IAL co-evolution. This process could have several benefits:

1) By gradually removing the necessity to learn

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more than two languages -- the mother tongue and the IAL basilect -- minority ethnic tongues might be revivified, not through subsidy and perceived weakness, but rather through indigenous pride, since international contact might thereby take place through the IAL rather than through linguistic subservience to a major regional language and its culture. In this way the aggrandizement of major languages at the expense of minor might slowly come to a halt and even reverse.

- 2) An English IAL basilect for the IAL could also serve as a springboard to higher-register ELF proficiency, not to mention access to EFL, ESL, EIC, ESP, WE and other putative registers or varieties of English. Given the strong role ELF plays in global academic, scientific, and political discourse, this feature may make IAL education attractive to ambitious parents seeking the best future for their children in a rapidly globalizing world. If educators in many countries explicitly endorse this option, implicitly tolerate it, or modify it in some effective manner, rapid initiation of IAL co-evolution may be possible.
- Synergistic interplay of many world languages with the IAL basilect, as well as with ELF and other registers of English, could result in an extremely rich world second language that reflects the cultural inheritances of diverse peoples. A significant opportunity for inclusive IAL co-evolution would be through cooperation and collaboration by minority speech communities using a simplified form of English that could be learned very quickly, and that would serve as a scaffolding upon which an IAL might be constructed. Simplified English would thus serve as intermediary global basilect by which these communities could tell, in their own way, what seems to them most important and valuable about their own languages. The English basilect would also provide the scaffolding for including elements of those languages in the co-evolving IAL, leading ultimately to a global acrolect. In the "bottom-up" part of this process, direct involvement of linguistic scholars and fieldworkers, always in short supply, would be limited, as we shall see.

The World Language Process (WLP), an

international non-profit organization, supports this overall concept of co-evolution (Britten, 2008). Although the WLP is willing to support any IAL process that humanity ultimately elects, the current trend toward global academic acceptance of ELF gives simplified English great potential to initiate a sustainable, symbiotic, and synergistic process of IAL/multilingual education and co-evolution. Native language education would be conducted in tandem with an easily learned English basilect, taught using the latest and most expeditious technology and pedagogy. The basilect would serve as a long-term scaffolding for co-evolutionary growth of a rich, equally-shared global IAL. could also serve as a springboard to higher registers of English for those needing such proficiency. In this way, the process supports efforts to promote linguistic diversity, to encourage literacy in minority languages, and to facilitate IAL co-evolution.

New-fangled hardware and software, combined with old-fashioned linguistic fieldwork, make practical steps toward these goals possible for the first time in human history. First and foremost among these hardware/software innovations is the One Laptop Per Child program (OLPC). The world-renowned OLPC hardware and software innovations, in pursuit of progressive social visions, are creating opportunities that simply didn't exist even a decade ago. OLPC may thus prove to be a seminal tool for co-evolution of the IAL. One can already observe OLPC influence on multilingualism fieldwork.

Initiated at the Massachusetts Institute of Technology, OLPC has produced a low-cost, rugged laptop already distributed to children in developing countries. (OLPC 2008) Salient features of the laptop include easy-to-use "meshware," wireless communication capability, Internet compatibility, and built-in cameras and microphones to enable real-time face-to-face communication. An internal, wind-up generator powers the colorful, rugged machine.

Software developers are working on languagerelated projects that support the OLPC program. These range from creating dictionary-building tools to developing and exploiting systems translation engines. If developers create innovative language-learning software for the OLPC program – teaching software that works equally well for native-language education and IAL education – such software would make OLPC a powerful means of protecting minority languages and facilitating co-evolution of an equally shared global language. We need not await such software to grasp the utility of OLCP hardware and software: projects already underway suggest the enormous potential. Among these is the remarkable WeSay dictionary development program. (WeSay 2008.)

WeSay is a partnership between SIL International (SIL 2008), publisher of the essential reference work *Enthnologue* (Ethnologue 2008), and Payap University in Thailand. This partnership supports a remarkable dictionary-building software tool currently used in Southeast Asia. In future, WeSay might prove useful worldwide, not only to linguists and lexicographers, but also to sociologists, anthropologists, and other academics and laypersons interested in language and society. The remarkable project has been made possible in large measure by the success of the OLPC concept.

WeSay's brilliant, intuitive dictionary-building tools enable ordinary persons to document their own languages, in their own languages. It is difficult to overstate the significance of this approach, and the importance of the OLPC hardware in making it possible. The relevance of the WeSay vision to this essay is that the same hardware, combined with equally well-designed software, could greatly facilitate IAL co-evolution.

WeSay dictionary tools and their implementation provide powerful examples of the top-down/bottom-up collaboration needed for IAL coevolution. WeSay helps us to see a path leading toward the long-elusive reality of a shared world language. The WeSay interface works by asking users various questions about their languages, in their own languages. In one example provided by WeSay, within the general category of "sun," a user might name all the words for things that protect a person or something from the sun. The person

herself controls the process, doing the work on her own laptop, without supervision of the linguistic fieldworker beyond the introductory explanation.

A particularly impressive aspect of the WeSay dictionary-tool is its apparently intuitive and enjoyable user interface, claimed to produce the largest collection of vocabulary with the least effort and least waste of time and energy. Data base creation is reportedly automatic and robust. Crucially, power is placed into the hands of the people whose language is being documented.

IAL co-evolution researchers and volunteers can learn from WeSay innovation and implementation. Similar methods could effectively promote a bottom-up/top down process of IAL co-evolution, a concept I have previously discussed apropos corpus linguistics. (Britten 2005)

This approach to fieldwork could also help researchers to identify ways of thinking that broaden our understanding of human society and its place in earth's environment. Not only IAL progress and multilingualism, but also many other endeavors would be greatly facilitated if dictionary-builders and language learners were empowered, using the IAL basilect, to tell the world what they think is most valuable about their own languages and cultures.

A single thought-experiment, based on a 1938 wax cylinder recording of the now extinct! Ora language, suggests the potential value of this approach. (Allison 1999). The original South African recording was featured at the Third International Congress of Phonetic Sciences in 1938.

A particularly moving part of this recording is the speaker's insistence that his language is beautiful and should be heard. His belief raises an interesting question: would this speaker, though not a linguist and knowing only his own language, have been able to explain what aspects of his language he considered most beautiful? What might he have chosen if given the chance to ensure that certain words and expressions and ideas could

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become part of a globally co-evolved language?

In raising this question, I am aware that aspects of any language and culture contain nuances and worldviews that may be difficult or impossible for others to comprehend. I appreciate also that some questions one might wish to ask a speaker of another language may literally be un-askable, having no meaning to the person being asked. Nevertheless, the effort is certainly worth making, if only because the answers could help to ensure the long-term survival of at least some elements of endangered languages.

This process would be greatly facilitated by a shared IAL basilect, as proposed in one current WLP paradigm of IAL co-evolution. This basilect would enable mutual discussion in a globally shared second language, about myriad global languages and cultures. This basilect also would provide a scaffolding by which various languages could build onto the evolving IAL structure. Without the intermediary IAL basilect, this process seems much less plausible. With a functioning global IAL basilect functioning via massively distributed, worldwide online communication, the hope of the extinct! Ora speaker might be at least partially realized for many minority languages.

Consider the remarkable "click" language called ! Kung, arguably the proto-language from which all others emerged. It is fascinating to speculate about words in this ancient language that might (once again?) spread globally. Within! Kung (one of many thousands of minority languages) there may be words that convey, in a single sound, complex meanings that no other language can quite approximate. Do the 80,000 speakers living today have perfect and irreplaceable words to describe, say, the emotional deflation of disappointment, or sudden, bounding joy? Might! Kung, like other minority and endangered languages, contain words that convey philosophical insights about the relationship of man and nature that no other words from any other languages provide? (Persons curious about ! Kung, may appreciate Miram Makeba's performance of "The Click Song," preceded by a fluent English introduction to her native language. (Makeba, unknown year)

Suitability and attractiveness of minority language words, phrases, and concepts could become known to speakers of other languages through the medium of OLPC global meshware communication, aided by person-to-person exchanges in the IAL basilect. To summarize the main points: a combination of OLPC-based programs, including documentation of minority languages, native language literacy education, and facilitated IAL co-evolution via English basilect education, might synergistically result in a surprisingly rapid emergence of a global second language. One can only speculate about the time frame, and in the initial stage of co-evolution, the IAL might resemble a fascinatingly complex hybrid World English. In time, however, this resemblance would likely become less pronounced and eventually fade away. Thus, although an English basilect would provide access to higher registers of English if desired, the co-evolved IAL built on this scaffolding would become remarkably different from any variety of English if many of the thousands of global languages significantly contribute to the process.

The protean, innovative linguistic powers of children virtually ensure IAL innovation if the process suggested in this essay can be initiated and sustained. The OLPC educational vision makes the transformative influence of children particularly likely, especially in light of David Lightfoot's seminal research.

Lightfoot's "How New Languages Emerge" (Lightfoot 2006) is highly relevant to this essay's overall argument. Lightfoot demonstrates that linguistic change results from the adaptations of children. His empirical study deals with closely observed and defined changes in well- established languages used primarily by monolingual speakers within a single culture, but has many implications and ramifications for the WLP concept of coevolutionary change to a modified natural root language. (Britten 2007).

In view of Lightfoot's recent research, the OLPC program's potential influence on global

IAL co-evolution is clear. What is needed to initiate and sustain global linguistic co-evolution is implementation of a plausible and pragmatic process corresponding with current and foreseeable global trends. The process described by the WLP, to reiterate, encourages co-evolution of an IAL deriving from education in an English basilect, combined with multilingual education, and aiming toward a global acrolect that includes elements of many world languages. Co-evolution in this context refers to cooperative, collaborative, and coordinated change. Co-evolution involves bottomup and top-down processes that would include academic researchers, language policy-makers, journalists and other writers, educators, students, and, ultimately, anyone who contributes to the process. It especially involves children, humanity's protean linguistic innovators.

If Lightfoot's hypothesis is applicable to globally linked children communicating via an easily learned IAL basilect, co-evolution may occur with surprising speed, via a "natural" (and well-documented) process that is greatly accelerated by powerful new technologies we now have at our disposal. In this regard, it is particularly noteworthy that the OLPC vision allows and encourages children (as well as parents and teachers) to develop their own tools, using free and open-source software:

Our commitment to software freedom gives children the opportunity to use their laptops on their own terms. While we do not expect every child to become a programmer, we do not want any ceiling imposed on those children who choose to modify their machines. We are using open-document formats for much the same reason: transparency is empowering. The children—and their teachers—will have the freedom to reshape, reinvent, and reapply their software, hardware, and content. (OLPC 2008)

Apropos the WLP vision, children could adapt OLPC open-architecture software to modify the very medium through which an IAL might naturally co-evolve. Children could create novel tools and processes to facilitate IAL co-evolution that proceed on their own terms. It would be

fascinating to see how children might modify OLPC software to make the proposed IAL process more appealing to themselves, to their teachers, to their local communities, and to volunteers involved in promoting the IAL. Children themselves might create a better means of IAL co-evolution than any currently on offer.

The deeper corollary is that children can not only modify man-made hardware and software, they can also reshape, reinvent, and reapply their native languages, the IAL basilect, received and regional lingua franca languages, pidgins, vernaculars, World Englishes, orthographies and semiotic systems. OLPC hardware, software, and "meshware" can facilitate this process, thereby helping to coevolve natural human language, the ultimate openarchitecture software of the mind.

An appealing aspect of this proposed openarchitecture process of IAL co-evolution is that a global "creolization" would result from wide-ranging choices at many levels of social and economic hierarchies. The topic of "creole languages" is quite complex and disputatious, and even the term "creole" is disputed, with some scholars favoring the term "vernacular." (Wikipedia 2008). Nevertheless, it is safe to say some languages identified as creole languages emerged from necessities imposed by displacement, slavery and plantation economics. The salient and profound difference between that kind of creolization and the WLP vision of IAL co-evolution process is that the latter would be devoid of the very negative associations of some documented creoles.

IAL co-evolution, as envisioned by the WLP, aspires from its inception to bring about benefits for all the peoples of the world. The primary beneficiaries of IAL co-evolution may be those persons denied the fruits, while bearing many of the costs, of so-called globalization. Ideally, disadvantaged men, women, and children in "developing countries," many illiterate in their native languages, would benefit from IAL/native language educational symbiosis and synergy in various ways:

1) Literacy education could proceed in native

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languages and the IAL in tandem, exploiting identical technology and methodology, including the OLPC platform and similar or compatible/convergent tools. The rapid and dramatic convergence of cell phone and Internet technologies, for example, provides an obvious potential platform for adult education, and possible OLPC/cell phone convergence. If the IAL basilect provides a ladder to higher registers of English, such education may prove extremely attractive to persons needing ELF proficiency, increasingly the standard for international academic, business, personal and political communication.

- 2) The IAL basilect could improve and simplify global charitable, relief, and rescue efforts. Once initial IAL pedagogical programs were in place, the benefits would become plain to many such groups, thereby eliciting their support and increasing global awareness of the feasibility of IAL co-evolution. Such increased public awareness in turn could greatly facilitate the process, creating a virtuous circle.
- 3) The IAL basilect could reduce the need for interpretation and translation of some kinds of international communication. Eventually, the emergence of an equally shared world language would put all the world's peoples on an equal standing in acquiring information at the same level of linguistic hierarchy.

The economic desirability of point three becomes clear when one considers that, as just one example, twenty percent of the United Nations budget is consumed by interpretation and translation costs - this for only six major world languages used as "standards." (Lauria 2006) The UN's General Assembly and Conference Management Department, which is responsible for translation, interpretation, printing documentation, and transcripts, cost \$565 million in the 2003-2005 UN budget, the single largest item. Verbatim transcripts of UN meetings reportedly cost as much as \$8,000 per hour to produce. (Lagon, 2005) The "bottom line" here is that the current system, at great expense, still leaves out 40% of the world's top ten languages, never mind the many thousands of other world languages.

Significant translation and interpretation costs are borne by various other government agencies, bureaucracies, aid groups, and businesses. Even if we take into account the fact that language services jobs are important to some persons in society, we are still faced with the fact that interpretation and translation are subject to error, ambiguity, deliberate distortion, and, in the end, less reliability than equal access to a common global second language.

Advocates of computer-operated hardware/software systems may argue that high-tech interpretation and translation will eventually bring about inexpensive, all-encompassing services. One effort in this direction is the Universal Networking Language (UNL), which is patented by the United Nations. The goals of UNL are extremely ambitious, extending even to a kind of universal encyclopedia accessible to speakers of all languages.

The Universal Networking Digital Language Foundation provides this description:

The UNL is an ambitious initiative launched in 1996 as a Programme of the Institute of Advanced Studies of United Nations University (UNU/IAS) and is inherited by the UNDL Foundation in 2001.

The UNL is a computer language that enables computers to process information and knowledge. It is an artificial language that replicates the functions of natural languages.

Using the UNL, people can express all kinds of information and knowledge that are conveyed by natural languages, and computers can intercommunicate using such information and knowledge. (Emphasis added.) The UNL not only makes it possible to provide people with a Language Infrastructure (LI) for distributing, receiving and understanding multilingual information, but also makes it possible to provide computers with enough knowledge in the form accessible and understandable. This Knowledge Infrastructure (KI) enables

computers to make intelligent processing including reasoning.

To make information and knowledge UNLized is a movement. The purpose of the UNL movement is to provide an infrastructure of knowledge for people to have equal opportunities to use without any language barrier and for computers to do intelligent processing using the knowledge. Developments in the UNL movement includes UNLization of knowledge in order to make them available for all, deconversion of the UNLized knowledge into various natural languages in order to make the knowledge understandable for all, and UNL-related tools and applications for people to be able to access or obtain the knowledge in UNL. (UNDL 2006)

Whether UNL can achieve this computermediated goal of making information available to all peoples in their own languages is anyone's guess. Even if so, however, such "UNLiszation" of language would not substitute for the co-evolution of an IAL. An artificial digital intermediary computer language simply cannot serve in place of a shared natural spoken and written human language, which is the objective of WLP volunteers. Moreover, the UNL goal of an artificial, digitized language produces an intermediary digital "tongue" known to and exploited by only a very small group of experts, who exercise primary or even total control over the outcome of the project. The WLP goal, in contrast, is to facilitate emergence of a global second language known to and shared equally by all the peoples of the world, and that individual men, women, and children would have the predominant role in directing the progression and co-evolution of the IAL.

This is not to say that UNL/WLP projects are mutually incompatible, but rather to say that they are radically different in their basic approach and outlook. "UNLization" might contribute to IAL coevolution in various ways. Similarly, many and diverse researchers may be able to take collaborative paths that serve to document and preserve minority and endangered languages, promote native literacy,

and simultaneously promote IAL co-evolution of a language that incorporates elements of many languages large and small. Such co-evolution could enrich humanity's vision of itself, and greatly expand its communicative repertoire. The resultant language may prove to be almost incredibly rich.

A co-evolving IAL could produce a language much richer than any that has ever existed, including English, itself a rich amalgam of Indo-European languages that has produced some of the great world literature. Prospects for a greatly richer hybrid language co-evolving from a scaffolding of English would make the prospects for poetry, theater, cinema, and literature very exciting indeed, and literally beyond our imagination, given the extraordinary number of world languages that may contribute to an emergent IAL.

Although the inclusive vision of a co-evolved IAL that includes many world languages may be appealing to some readers, others may harbor deep reservations and objections to the idea of modified English as a basilect. To suppose that English might provide scaffolding for a world language may seem inexcusably presumptuous, particularly coming from a native speaker of the language.

This attitude is perfectly understandable, given the fact that in my own country, the United States of America, several hundred minority native-American languages have been entirely or virtually extinguished over the past few centuries. Researcher David Truer estimates that only a few Indian languages will exist in 2050. His, Ojibwe, has about 10,000 speakers.

Truer has written eloquently about preserving his language. "If my language does die -- not now, not tomorrow, but, unless something changes, in the near future -- many understandings, not to mention the words that contain them, will die as well." He gives as an example the Ojibwe word for "namesake," niiyawen'enh.

Every child who gets an Ojibwe name has namesakes, sometimes as many as six or eight of them. Throughout a child's life, his or her namesakes function a little like godparents, giving advice and help. . . But they offer something more too. The term for "my body," niiyaw (a possessive noun: ni- = "I/mine"; -iiyaw = "body/soul"), is incorporated into the word for a namesake because the idea (contained by the word and vice versa) is that when you take part in a naming, you are gifting a part of your soul, your body, to the person being named. So, to say "my namesake," niiyawen'enh, is to say "my fellow body, myself."

If these words are lost . . . mechanics of life as it is lived by modern Ojibwes will remain, for the most part, unchanged. The language we lose, when we lose it, is replaced by other languages.

And yet, I think, more will be lost than simply a bouquet of discrete understandings -- about bears or namesakes. If the language dies, we will lose something personal, a degree of understanding that resides, for most fluent speakers, on some unconscious level. We will lose our sense of ourselves and our culture. There are many aspects of culture that are extralingual -- that is, they exist outside or in spite of language: kinship, legal systems, governance, history, personal identity. But there is very little that is "extralingual" about story, about language itself. I think what I am trying to say is that we will lose beauty -- the beauty of the particular, the beauty of the past and the intricacies of a language tailored for our space in the world.

Yes, that's it: We will lose beauty. (Truer 2008)

In the case of the Native American languages, the loss of language, culture, and life has come from what we now call ethnic cleansing and genocide. Globally, historical association between English language and Anglo-American conquest and colonialization is unavoidable. On that basis one could say that an IAL deriving from scaffolding of English would be built within a skeleton of murdered languages.

There are persons who have every right to make such statements. In reply one might offer this idea; that perhaps English in the modern world has the potential to do far more good than harm, and might even undo some of the harm already done. It would be particularly gratifying in this regard if the proposed IAL English basilect could help to protect at least some of the world's nearly 7,000 languages, and ensure their contribution to a co-evolved IAL.

This may seem hopelessly idealistic, but regarding Truer's sense of lost beauty, one could do worse than hope that a co-evolving IAL could do more than preserve minority languages. It is not inconceivable that it could help to recover some of what has already been lost and is rapidly being lost now. This essay has provided evidence that such a co-evolving IAL would include words, phrases and concepts from many of the world's languages. In turn, many neologisms could result from the tumultuous mixing and merging of the enormous, expanding circle of the IAL. If so, perhaps some words and ideas that Truer prizes might survive within an IAL, as well as flourish within the Ojibwe community. An equally shared global second language, a co-evolved IAL, could be an astoundingly rich source of new beauty.

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