DOCUMENT RESUME

ED 091 936   FL 006 092

AUTHOR   Ferguson, Charles A.
TITLE   A Sample Research Strategy in Language Universals.
                Working Papers on Language Universals, Number 6.
INSTITUTION   Stanford Univ., Calif. Committee on Linguistics.
PUB DATE   Oct 71
NOTE   25p.

EDRS PRICE   MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS   Language Research; *Language Universals; *Linguistic
                Patterns; *Linguistic Theory; Morphology (Languages);
                Phonetic Analysis; *Structural Analysis;
                *Syllables

ABSTRACT
                The paper presents a set of linguistic phenomena
illustrative of the notion "universal tendency". Linguistic
generalizations are regarded here not as isolated, "true-or-false"
propositions but as embedded in a hierarchy of competing forces. An
"exception" to a universal is thus seen as the result of the
prevalence of another conflicting universal tendency. Examples
discussed are taken from Latvian child language, Bengali word order,
and from the characteristics of the copula in a number of languages,
particularly Bengali and Amharic. (Author)

WORKING PAPERS ON LANGUAGE UNIVERSALS

Charles
Ferguson

Number Six

October 1971

Language Universals Project
Committee on Linguistics
Stanford University
Stanford, California

TABLE OF CONTENTS

A SAMPLE RESEARCH STRATEGY IN LANGUAGE UNIVERSALS[*]

Charles A. Ferguson

ABSTRACT

The paper presents a set of linguistic phenomena illustrative of the notion "universal tendency". Linguistic generalizations are regarded here not as isolated, "true-or-false" propositions but as embedded in a hierarchy of competing forces. An "exception" to a universal is thus seen as the result of the prevalence of another conflicting universal tendency. Examples discussed are taken from Latvian child language, Bengali word order, and from the characteristics of the copula in a number of languages, particularly Bengali and Amharic.

THIS PAGE WAS MISSING FROM THE DOCUMENT THAT WAS
SUBMITTED TO ERIC DOCUMENT REPRODUCTION SERVICE.

Among the primary aims of linguists are such things as developing
a general theory of language and improving their abilities to characterize
languages or varieties of language. In other words, linguists want to
develop some kind of general theory of language, and they also want to
write better grammars. Of course these are not unrelated tasks; one
thing they have in common is the search for basic similarities among
languages, that is, similarities that have a maximum amount of gener-
ality and a maximum amount of substance or content. Now, there are
lots of ways that one can look at these similarities among languages and
certain of them we are accustomed to labeling universals. This evening,
I just want to play with one way of talking about universals. And that is
not to say that every language must have X or that if a language has X, it
must have Y, which are kinds of universals that we talk about from time
to time. Instead, I am going to talk about the notion of "universal tendency",
which means something like this. First, it says that other things being
equal, a language will tend to behave in a certain way, and if a language
doesn't work this way, then you had better look at the language more
closely and find out what's the matter with it, that is, find out what is
making it go wrong, why it isn't behaving according to the universal tend-
ency. Second, it says that if we collect enough of these universal tend-
encies, we observe that they are sometimes in conflict with one another,
and if one universal tendency doesn't seem to work out in a particular
language it is because some other one took precedence, some other one
higher in the hierarchy cancelled it out or "won" in that language.[1]

---

[1] The notion "universal tendency" is not different in principle from
the notion of "language universal" as used by Greenberg. It merely
makes explicit several features which are useful to bear in mind in re-
search on universals. (1) A "universal" may be significant even if it
seems not to hold in a number of languages. (2) A counterexample to a
proposed universal may only show that the language in question is in
some sense abnormal and merits special investigation. (3) Proposed
universals must be related to one another in terms of precedence or

Let us now play with this notion of universal tendencies. Let us
list some of them, and talk about one possible research strategy for
getting at them; and then at the end, even if we decide there are no such
things, we may still have found it has been a useful game. In making a
little clearer what I mean by universal tendency, I guess Dan Slobin
wouldn't mind if I use one of his favorite examples. In general, you can
say that a child learning his language will first put words together that
correspond to subject and complement without any kind of copula or
connecting link, even if the language that he is learning regularly has
such a connecting link. It will only be later on that the child will acquire
that copula. Let's say that there is a "universal" that, other things be-
ing equal, languages are so constructed that if a child is going to learn
one, and it is his first language, he'll tend to leave out the copula for a
long time and then finally acquire it. But it so happens, if you believe
the accounts of a couple of Latvian children learning LATVIAN, that they
learn the copula -- they learn the word 'is' -- quite early. From the
point of view of universal tendencies that we are taking, we would say:
let's look at LATVIAN and see if we really have to abandon this universal,
or whether there isn't something peculiar about LATVIAN that takes pre-
cedence over this particular universal at this time in this language. And
it turns out that in LATVIAN, the word 'is' is also used as a regular affirm-
ative response to questions, or even an affirmation of a previous state-
ment as a way of saying 'yes' (Rūķe-Draviņa 1959: 220, 221). So there

---

Footnote 1 continued)
relative power and precise sets of conditions for alternative tendencies
must be sought. The notion "universal tendency" may seem weaker than
either "universal" or "implicational universal" as commonly used, but
when a proposed universal tendency is placed within a hierarchy of tend-
encies or is seen as part of a set of variously weighted tendencies, the
validity of the larger complex may make stronger claim` about the nature
of language than pure, simple universals. It is worth noting here that the
notions of hierarchy and weighting are only partly equivalent to the notion
of ordering.

are two competing universals in the LATVIAN case: one holds that the
copula is deleted in baby talk and does not appear in the early stages
of child language (Ferguson 1971) and the other holds that emphatic
affirmative and negative sentence-words like yes and no appear in the
early stages of child language. The apparent failure of the one is really
only the other one taking precedence.

Let me give one other example, since the first one involved child
language acquisition and doesn't sound like the linguistic universals
people usually look for. Let's say one might set up a universal tendency
that where you have a verb of existence and an indefinite subject, the
verb of existence will tend to appear at the front of the sentence or tend
to move toward the front of the sentence, no matter where verbs nor-
mally appear in that language. For example, it is somehow more natural
in ENGLISH to say There is a book on the table than it is to say A book is
on the table. That is, we have this preference for putting is further
front in sentences like that. In a language which normally puts the verb
first anyway, this tendency would not be so striking, of course, and in
fact the universal tendency would just be "smothered": it isn't negated
but it's not really confirmed either. It would be more noticeable in
languages where the verb regularly comes in between subject and com-
plement or object, as in ENGLISH. But, if we look at languages which
normally have the verb in final position, we might expect there would
not be such a clear working out of that tendency. In BENGALI for exam-
ple, the verb normally comes last. And when you have the existential
verb (ache) and an indefinite subject, the verb doesn't usually move
forward. So, it looks as if the pull of the verb-final position is just
too strong for it. But the tendency is there. For example, in story
telling, if you say 'once upon a time, there was a book on the table'...
and so on, you may put the verb first, you may say "Is a book on the
table" ache boi tebile instead of boi tebile ache , which would be the

normal way of saying it. [2] We can look at this situation as three
universal tendencies interacting:

(a) Existential verbs are fronted in sentences with indefinite subjects.

(b) Verb fronting is less powerful in SOV than in SVO languages.

(c) Verbs are fronted in narrative styles.

In this case the extra force of (c) is enough to overcome (b) and let (a)
take its course.

Now, if we believe that there are such things as universal tendencies,
or at least think it is useful to conceptualize the question of universals
in this way, then how do we go about identifying them? One obvious way
would be to take a possible tendency, or, if we can't even identify it,
preliminarily, a particular set of phenomena -- a "medium size" set
preferably -- and look at it across lots of languages. For example, pick
a hundred languages and see what they do about a certain kind of verb, or
see what they do about some particular kind of construction or set of limi-
tations in phonology or something like that, and then see if we can identify
some universal tendency, and try checking it out. That is one strategy,
and some of the people in the Language Universals Project at Stanford do
spend their time following it. They may not be phrasing their search in
terms of universal tendencies, but they do take a set of phenomena and
look at them as best they can across 50 or 100 or more languages, in so
far as they can find reliable grammars that have the information they
need.

Sometimes people do identify universal tendencies in this way, but
it is not the strategy that we want to discuss here. The strategy that I
want to illustrate is based on looking at one language instead of a lot of
languages, looking at one language with great care and intensity, i.e.

---

[2] For an attested example cf. Page 1934: 180 "aek chilo casa, ar
tar chilo aek chele ..." ("one was farmer and his was one son" "once
there was a farmer and he had a son').

at a limited set of phenomena in the language, and then sitting and thinking
for a while, to see if you can guess at some universal tendencies. They
may occur to you for various reasons, such as a striking asymmetry
of some kind. Anyway, once you think of a tentative "universal tendency"
you check it out against other languages that are likely to disconfirm it
or give supporting evidence, and you pick out, not any 150 languages, but
particular languages that might give some confirmatory evidence or some
evidence that you are going in the wrong direction. For example, you
might get interested in how verbs of "being" work in BENGALI, and if you
look at them intensively and think about them you might guess at a half
dozen or so possible universal tendencies, and then you could check them
out against particular other languages that you think might be relevant.
Let me give one example of this way of proceeding before we get more
serious about BENGALI verbs of being . Some languages have a regular
way of saying 'is' when you have a subject-complement construction of
the equivalence type or attribution of a property or class membership,
for example in a sentence like <u>Joe is a carpenter.</u> Other languages
don't have a regular way of saying 'is' in sentences like this. For the
moment let's not discuss why some language don't have an equivalent for
'is', a copula, or why some languages do. And also, let's not discuss
the different kinds of copulas there might be, how one language might
have six ways of saying 'is' in subject-complement sentences. Let's just
accept the fact that some languages have a copula there, and some lan
guages don't. If we examine one language with care we may note that the
copula is always absent under certain conditions, optional under other
conditions, and sometimes obligatory. If we thought about it a little bit
we might guess that there are certain preferred contexts in which copulas
universally are more likely to be absent. For example, they may be
much more likely to be absent in the third person singular than they are
in any other person or number, or more likely to be absent in the present

tense or timeless use rather than some other tense or aspect, or more likely to be absent in a main clause than in a subordinate clause. These possible universal tendencies could then be checked with languages which are known to lack a copula in subject-complement sentences and a hypothesis might be supported.

All this is a nice background to noting that BENGALI doesn't have an equivalent for 'is' in a sentence like 'Joe is a carpenter.' or 'Ram is a student.' It is interesting, however, that there are occasions when BENGALI speakers do put something in a sentence like that. Let's take an actual sentence -- 'This is Mr. Dutt' ini dɔtto mɔsae̐ ("this Dutt Mr."). That's the normal way to say it, and it's perfectly all right to say it that way any time. We have a subject and a complement, and no overt equivalent for the BENGALI word 'is'. And let's remember that if there were going to be an equivalent, we would expect it to be at the end of the clause where verbs normally come in BENGALI. We would expect it to come out ini dɔtto mɔsae̐ X: whatever verb the X would be, that's where we would expect it to come. Now, it so happens that when you do put some kind of an overt copula in a sentence like this in BENGALI, you put the form between the ini and the dɔtto mɔsae̐, that is, between the subject and the complement. And what is more, it's a strange sort of form. It's a form that comes from a verb meaning 'to become', which does serve as a copula sometimes in other connections, and the simple past tense or the present progressive, or, more rarely, even the present may be used. So you can say ini holen dɔtto mɔsae̐, past 'became'; ini hoccen dɔtto mɔsae̐, present progressive 'is becoming'; ini hɔn dɔtto mɔsae̐, present 'becomes'. All these are possible, although the last one is not very likely, but they all mean 'is', not 'was' or 'is being', and are completely interchangeable as far as the meaning is concerned. They all mean 'This is Mr. Dutt.'

Now, this is an interesting phenomenon. In a language that normally doesn't have any overt equivalent for a copula, when the speakers of the

-9-

language do want to put something in, they put it in the wrong place, and it's an abnormal form, that is, it doesn't work the way verbs normally work in that language. Of course, a copula does not have to be a verb, it could be some kind of particle for example, but in this case it is functioning like a verb in having tense markers, personal endings and so forth, but it's also aberrant in having the interchangeable tense possibilities and the wrong position. Let us try for a universal tendency. If a language doesn't have a copula in the sense that 'Joe is a carpenter.' has no 'is', and if the people who speak that language want to put something in as a copula substitute, what would they put in, and where would they put it in? Let's hypothesize a universal tendency to put something aberrant in that doesn't function as a regular verb, and put it between the subject and the complement, no matter where the verb normally comes. Now, let us look for some other languages that don't have a copula, and see whether any of them can have a kind of a pro-copula in this situation. I guess I couldn't help thinking of a number of Semitic languages, ARABIC for one, which have a zero copula. When the speaker of one of these languages wants to, he can put in a kind of pro-copula. And what these Semitic languages do in general is to put in not a verb at all, but a pronoun that means "he" or "she" or "that one" or something like that. So it's certainly anomalous as verbs go. Semitic languages are generally verb-initial languages, so you would expect they ought to put the pro-copula at the beginning of the sentence, but no, they put it between the subject and the complement. So here we have a very nice example supporting our proposed universal tendency.

Well, this is a good illustration of something quite unexpected which you find counterparts for in a number of unrelated languages. There regularly is no copula in constructions like 'John is a carpenter.', but when you do put one in, you put it between the subject and the complement, no matter whether it is a verb-first or verb-last language, and

the pro-copula is anomalous in that it doesn't work like other verbs in the language. Is that enough of an illustration of how you might go about following the strategy of looking for a universal tendency by looking at one language that will either confirm or destroy it? For those who feel particularly skeptical about the pro-copula tendency, it's worth pointing out that if you look at some other languages, you nd further evidence confirming it. For example, in HUNGARIAN, nere the copula normally must be left out if it's third person singular and must be put in in most other cases, there are some sentences where the copula is optional, and in those sentences, the coupla is normally inserted between the subject and the complement (including adverbial phrase) even though the verb 'to be' when it's existential in HUNGARIAN comes at the beginning of the sentence, and when it's the regular copula normally comes at the end of the sentence.

Now let's begin to talk about verbs of being in BENGALI. What kind of a field of inquiry is "verbs of being" anyway? How do you cut up a language so that you look at verbs of being? We have to admit right away that it's an arbitrary kind of decision. It starts out by asking what is the Bengali equivalent for the verb to be in ENGLISH, and of course that's not a very sensible way to proceed. If you do start off that way, you find out that, as in many languages, there is a regular way to express this kind of copulative function and there is a regular way to fulfill certain existential functions and these two manners of expression also act as auxiliaries, dummy carriers of tense and so on. And so gradually you find a complex of facts that seem to fit together into kind of a subsystem in BENGALI, and then you can cut yourself loose from ENGLISH and find some parts of the system that aren't equivalent to ENGLISH be in any way, but join to form a coherent system in BENGALI. So you do have a field of inquiry even though you started out getting it in a fairly arbitrary kind of way. Now let's describe a little bit the system of verbs of

being in BENGALI is for as we need it for our discussion. First, a
little polemic. It won't be much, just a few sentences. In many languages
where there is no overt copula in a sentence like 'Joe is a carpenter.'
it is said that there really is a copula somewhere that has been deleted.
This view makes sense in a lot of languages and I wouldn't quarrel with
regarding it that way in those languages. But people have said that it's
also true of BENGALI. I find that it doesn't work that way in BENGALI,
and so I have to make this polemic.

Let us get some of the facts straight. Some BENGALI sentences
that are equivalent to ENGLISH sentences with is have an overt mor-
phemic equivalent for is and some don't. For example, the verb ache
that I used a little while ago may be present in a sentence or not, some
sentences can be said either with or without the ache, so that it really
seems as though there is an ache around always which under certain cir-
cumstances gets deleted. But this turns out to be a superficial view. If
you have a sentence like cheleṭi bhalo 'The boy is good.' you may put
ache in and say cheleṭi bhalo ache, but the sentence without ache means
'The boy is good (in moral character).' or 'The boy is good basically.'
or something like that and the sentence with ache means 'The boy is well
in good health.' So at least that raises some doubts in our minds. If
you ask BENGALI grammarians what has been deleted or is "understood"
in the sentence without overt copula, they'll tell you it's hɔe from the
verb that means 'become' that was mentioned a little while ago. However,
if you actually used the sentence cheleṭi bhalo hɔe it doesn't mean 'The
boy is good.', it would mean 'The boy becomes good.' Thus, there are
three different sentences: one with zero, one with ache, one with hɔe,
and they have quite different meanings. This is enough to show that the
idea of a simple copula which is deleted in the zero copula sentences is
not adequate.

ERIC
FullText Provided by ERIC

If you look at what happens to these sentences in other tenses than the present, or in subordinate clauses such as 'if the boy is good', then you see a lot of funny things happening. BENGALI has two different constructions, zero copula and ache, and each of these has a special negative and a special suppletion in subordinate clauses.

Main clause		Subordinate clause	
Affirmative	Negative	Affirmative	Negative
∅	n<u>ɔ</u>e͂	h<u>ɔ</u>e͂	na hɔe͂
...	nei	thake	na thake

Also, the verbs h<u>ɔ</u>e 'becomes' and thake 'stays' appear in main clauses with their usual lexical value:

<u>chelefi bhalo hɔe͂</u>   'The boy gets well.' (or less likely, 'The boy gets good.')

<u>chelefi bhalo thake</u>   'The boy stays well.' (or less likely, 'The boy stays good.')

(Cf. Sableski 1965; Ferguson, forthcoming)

This is enough background about verbs of being in BENGALI to suggest that it is complicated, and it's much more complicated than that there are just four "copulas". There are other verbs that can be used in parallel existential, copulative, and auxiliary functions, verbs that mean things like 'fall' and 'go' and so forth, which interact with those verbs meaning 'become' or 'stay'.

We have had enough background information for our purposes, I think. Now we want to move to the universal tendencies that I'd like to talk about. If you look at something like this system of verbs of being, you might get the notion that languages in the world are not completely arbitrary in the way they run systems like verbs of being, i.e. there won't be an infinite variety of such systems, but rather there'll be some major types. And if so, it might be reasonable to suspect that systems of verbs of being would be related to other facts about languages. In

particular, they might be related to some overall typological notions
about how languages work. For example, languages which characteris
tically have the verb at the end or the verb at the beginning, or in the
middle, might tend to have certain kinds of systems of verbs of being.

So let's begin by asking what kind of language BENGALI is, in this
kind of general typological framework. Usually there isn't an easy
answer to things like that, but in this case, you can turn to the right
page in Greenberg and it turns out that there's a neat type that BENGALI
fits into: his "rigid III" type. These are languages - and you can all
think of some examples, I am sure - where characteristically the verb
goes at the end, where adjectives precede nouns, where there are post-
positions instead of prepositions and so on. These languages are exclu-
sively or nearly exclusively suffixing, use predominantly postpositions
rather than prepositions, and have a case system marked by noun suf-
fixes. Question words like "what", "where", and so forth are typically
non-initial and general sentence interrogative particles come at the
very end of the sentence after the verb. Modifiers precede their heads;
subordinate clauses including relative expressions precede the main
clause; genitives and adjectives precede their nouns. Comparison
markers are on the standard noun, that is comparisons take the form
'Y-than X is good' to mean 'X is better than Y'. All those are things
Greenberg used to characterize these languages, and there are other
features which seem to be present in many of them, possibly all. For
example, they have what might be called a "conjunctive" form of the
verb with the meaning 'having done something and...'. They have one
kind of compound verb where there's a noun-like or an interjection-
like preverb combined with a colorless auxiliary of the 'do', 'give',
'say' variety, and another type consisting of the conjunctive form of
verb plus one of these auxiliaries. The nouns have an optional plural,
that is, there may be a morphological way of expressing plural, but

it's not normally used with the tense. Anyway, this is a fairly neat type
in which you can classify lots of your favorite languages. Languages
like JAPANESE, for example, clearly belong to it; a number of Uralic
and Altaic languages such as TURKISH belong in it, and the language
BENGALI, it so happens, clearly belongs in it. So, now the stage is
set. We know something about the verbs of being in BENGALI and we
know something about this global sort of typology, so that we can see
if there's any relationship between them.

First, let us note that languages like JAPANESE and TURKISH have
been "rigid III" for as long as we have documentation for them. They
may have shifted in detail, replaced parts of the systems and so forth,
but they have stayed this way for a long time. However, BENGALI is
known not to have been that way some centuries ago. SANSKRIT was
not like that. MIDDLE INDIC was beginning to be, but when you finally
get to modern BENGALI, it is very much like JAPANESE and TURKISH,
it has moved all the way over in that direction. This would suggest that
if we looked at BENGALI, in particular at some of the salient characteris-
tics of its verbs of being system, and then picked another language that
we know started from some other type and has developed into the "rigid
III" sort, we would want to see some universal tendencies exemplified.
In other words, if the language that separates copula and existential verb
and has come to belong in this rigid III category, it should have moved
along the same path and should have some of the same characteristics.
Is that line of argument clear enough? Then let's look at some of the
salient features in BENGALI that we might want to look for in some other
language.

We are talking about languages going through some sort of cycles
and moving from one general place to another in Greenberg's and other
typologies, and going by the same path. I assume BENGALI first started
its shift from SANSKRIT to JAPANESE type, let's say, by moving the

verb to the end; that is, that was one of the first things that
happened. And it was later, for example, that postpositions replaced
prepositions. In other words, there seems to be a certain order or
sequence of these events. Just to illustrate what I mean, the Semitic
languages of Ethiopia are following roughtly the same path: they started
out being verb-initial languages and moved over to be verb-final lan-
guages; they used to be prepositional languages, now they are postposi-
tional. And there we have enough documentation, older and current
documentation, from different related languages, to see the process
at various points. For example, AMHARIC, TIGRE and TIGRINYA
have all moved the verb to the end, but TIGRE still has only preposi-
tions, no postpositions; TIGRINYA has prepositions and postpositions,
often in combination, that is, with something both before and after the
noun. AMHARIC seems to be in a stage of being prepositional-post-
positional like TIGRINYA, and Greenberg doesn't include AMHARIC in
rigid III for this reason, but in fact it is just about postpositional since
typically the preposition part is a colorless kä- or bä-, with very
little meaning, and the postposition carries most of the meaning. Fur-
thermore, in ordinary colloquial AMHARIC today, the tendency is to
drop the preposition part and just use the postposition, so that AMHARIC
is finally moving all the way over to having postpositions instead of pre-
positions. Well, that's an illustration of the way this kind of typological
shift might have taken place in BENGALI, and in large part I think did.

Now let's suggest a half dozen or so possible universal tendencies
on the basis of the BENGALI verbs of being. One is fairly simple. If
a language has separate existential and copula verbs, that is if it has
different lexical items for the 'is' of 'there is' and the 'is' of 'Joe is a
carpenter', and if either one of these is grammatically unique in a lan-
guage, its negative also will be grammatically unique. By "grammatically
unique" I mean it clearly belongs in a certain word class, but is unique

in that class, that is, it doesn't behave like the others in the class --
it may lack six tenses, or have a funny kind of suppletion, or just very
obviously not fit. Stated again, if the copula or existential verb is
grammatically unique in the affirmative, its negative will not be made
the way you normally make negatives in the language either. In BENGALI,
to make a negative you normally add na, but the negative of ache is not
ache na, which can't be said, but nei instead, an invariable negative
existential verb. And also, if you want to negate the zero copula, you
don't just put a na in (although as a matter of fact you can, but it's not
the normal way to do it); you use a different verb, a negative copula n̆e
which is conjugated, but is quite defective, and is clearly a grammatically
unique item of the language. You know, you hate to make that kind of
universal tendency statement without looking at at least one other lan-
guage. And it so happens that Langendoen wrote a description of verbs
of being in MUNDARI, and MUNDARI has a copula menaq which is gramma-
tically unique: "...the Cop menaq [is] conjugated differently from verb
roots". Verbs are normally negated by preposing ka in MUNDARI, but
it turns out that the negative of the copula is banuq which bears no rela-
tion to any other negative in the language. ...
containing the Cop menaq, ...
sequence by menaq, ...
has a grammatically unique copula ...
copula (Langendoen 1967).

     Let's try a second universal tendency. If you have a separate exis-
tential verb and copula in the present tense, the universal tendency is
to have them share a past tense. That seems unexpected, that is, you
wouldn't have thought of that if you hadn't studied BENGALI or some
other languages. In BENGALI the form chilo 'was' may serve for both
the zero copula and the existential ache. Well, we just said we should
look for at least one other language somewhere, and CLASSICAL

ARMENIAN comes to mind. CLASSICAL ARMENIAN does have several
verbs "to be". In particular, there is a present goy which means 'there
is' or something like that, and there is a present ē which means 'is'
as a copula and they share a past tense elew which goes for both of them
but is not clearly related to either one etymologically (Ó Coigneallaig
1968). CLASSICAL ARMENIAN is a fine confirmatory language as far as
we're concerned, it bears out this particular universal tendency.

We can build on that past tense business a little bit. As you remem-
ber, ache and zero copula have quite irregular negatives; they are gram-
matically unique and have grammatically unique negatives. The past
tense of both these, chito, has a negative made in just the ordinary regu-
lar way, chito na. Let us hazard as a third universal tendency that the
past tense of a verb of being will have a regular negative. Well, in
MUNDARI, to go back to Mr. Langendoen, the past tense of menaq is
tai and to negate it you just add the ka to it, as with any other verb.
MUNDARI isn't really such a good example for our purposes, however,
because it doesn't have a separate existential verb and copula. So let's
look at another language.

There is a language called BILIN spoken in northern Ethiopia, on
which Frank Palmer wrote an article called "Bilin 'to be' and 'to have'
giving all the forms (Palmer 1963). And it's just marvelous, there is a
grammatically unique negative for the existential and for the copula,
they share a past tense, and the past tense makes its negative regularly.
So we have some evidence for that universal tendency.

Let's look at something else. In many languages there are supple-
tions of copulas or existential verbs which come from other verbs in
certain semantic ranges, for example, verbs meaning 'become', 'stand',
'stay'. That is, the suppleting verb is used as an ordinary verb with a
full set of forms, but is also used for a tense or other form for which
the verb of being is defective.

In BENGALI the verb 'dwell, live (somewhere), stay' is used in
place of the present tense of ache and in place of non-present tenses of
ache (e.g. future), and as we saw before, in certain kinds of subordinate
clauses (e.g. conditionals). Similarly the verb 'become' is used in place
of the present-tense valued zero copula in subordinate clauses and in
non-present tenses such as the future. Let us hazard the universal
tendency that if a language has separate existential and copula, and if
it has suppletion by verbs 'to become' and 'to dwell', then the verb 'to
become' will be the suppletive form for the copula and the other one will
be for the existential verb.

Let's try a final pair of universal tendencies. On the basis that
BENGALI has a present progressive bolce 'is saying' and a perfect
bolece 'has said', let us hypothesize that in a language with separate
existential and copula, the existential verb will tend to be used as an
auxiliary, combining with the conjunctive form of the verb mentioned
before, to form a tense of either present state, 'is now doing', or per-
fect resultative type, 'has done'. And as such, to push the universal
tendency a little bit further, the existential verb in this construction
tends to become a tense-forming suffix rather than just a kind of auxi-
liary. In JAPANESE, for example, there is a regular construction of
conjunctive plus existential (e.g. shite iru) meaning either 'is doing'
or 'has done (and the effect is still there)'.[3] In asserting that in

---

[3] In JAPANESE the construction has both values. In BENGALI
there are two different constructions, one clearly the conjunctive plus
existential (value: perfect) the other a form of the verb whose etymology
is unclear (active participle? conjunctive?) plus existential (value:
present progressive). When the history of a language is well enough
documented it may be possible to see successive re-formations of
these tenses. In JAPANESE the conjunctive form in -te is apparently
historically a conjunctive form plus existential which has lost its ori-
ginal morphemic identity; in BENGALI where the morphemic identity
of the perfect suffix is becoming less clear, a new formation of con-
junctive plus existential for a particular class of verbs is coming into
use.

verb-final languages of this kind, if you have separate existential and copula, the existential will tend to be used with the conjunctive form of the verb to produce sets of forms of either present state or perfect meaning, we may note that it is not too different from tendencies that we're familiar with in some European languages where a verb "to have" is combined with a past participle to make a perfect or a copula is combined with a present participle to make a tense of present state. So, the kind of tendency that we're talking about here in these languages is parallel with other tendencies exemplified in languages of different structures.

Now let's stop listing these universal tendencies and get to a striking bit of evidence that maybe all these universal tendencies have something to them. So far we've really been playing, because citing BENGALI and one other language in each case is not too convincing. But let's check a set of facts in the AMHARIC language which should be parallel to BENGALI. BENGALI started out being something else and it ended up being one of these typical SOV languages, and it now has separate existential and copula verbs. AMHARIC also started out with a different kind of grammar and ended up being this "rigid III" type and it has a separate existential and copula. So the stage is all set. What we should do then is to look at AMHARIC and go right down through the universal tendencies and see if it matches BENGALI.

Twelve features of the 'verbs of being' system are identical in BENGALI and AMHARIC.

1. Both BENGALI and AMHARIC have a present tense existential verb inflected for persons.

2. They both have a present tense copula different from the existential (in one case a zero).

3. They both have a negative existential verb irregularly formed.

4. They both have a present tense negative copula irregularly formed, inflected for person.

5. They have a common past tense for the copula and existential verb.

6. They have a common past tense negative regularly formed.

7. Other tenses of the copula, including the imperative and the infinitive are suppleted by regular forms of the verb 'to become'.

8. Other tenses of the existential verb, including the imperative and the infinitive are suppleted by regular forms of the verb 'to stay' or 'to dwell'.

9. In both languages the present tense of the existential verb can be suffixed to the conjunctive yielding a perfect tense.

10. The common past tense suffixed to the conjunctive yields a kind of emphatic past tense something like the ENGLISH past perfect ('had done') but only partly overlapping with it.

11. In both languages the present tense of the existential verb is suffixed to verbs yielding a present continuous tense.

12. The common past tense is suffixed to verbs yielding a past continuous tense.

So there are twelve distinct features which match exactly point for point right down the line in BENGALI and AMHARIC. BENGALI and AMHARIC are unrelated languages; they have never been in contact with one another as far as anybody knows. And the particular lexemes and grammatical morphemes that we're talking about don't show any phonological similarities. For example, the present tense negative existential verb irregularly formed is nei in BENGALI and yälläm in AMHARIC. There has been no borrowing and there is no genetic connection but there is a point for point agreement on these twelve features in the verbs of being systems for AMHARIC and BENGALI. Now, it's true that this could just be coincidence, but it seems highly unlikely. That is, we set the stage that way, finding a language which has moved through time, changing its general

typological classification this way and has separate existential and
copula. This would be quite a set of coincidences to account for. It
is also possible that our universal tendencies are not the ones at work,[1]
that a different set of principles or rules or universals are involved
here that account for this striking similarity in BENGALI and AMHARIC.
But for one evening of playing around with strategies for getting at uni-
versals, I think we might let ourselves have the pleasure of saying that
maybe these universal tendencies are responsible for it, and even if,
in the final analysis, this is not so, we may still recognize that we have
found one particular, viable strategy for getting at some universal
features about language, contributing either to a general theory of
language or to improvement in the writing of grammars. The strategy
is to take one particular set of phenomena in a given language that seems
to be a natural class of phenomena in some sense, look at it very in-
tensively, trying to guess at some "universal tendencies", and then think
of languages that might give evidence and then check it out, and give an
evening's talk about it or write it up in some way so that more people
can have a chance to check out the particular universals that you have
guessed, or better yet, find still more basic principles that underlie
them.

[1] For example, tendencies which have to do with tense neutralizations
in copulas and the development of tense-aspect systems in general might
account for the congruences all apart from the typological considerations
considered basic here. Identification and substantiation of such tendencies,
however, seems more problematic than the argumentation offered here.

REFERENCES

Ferguson, Charles A. 1971. Absence of copula and the notion of
simplicity: a study of normal speech, baby talk, foreign talk
and pidgins. In Dell Hymes (ed.) Pidginization and creolization
of languages. Cambridge University press.

_____. Forthcoming. Verbs of 'being' in Bengali with a note on
Amharic. In J.W.M. Verhaar (ed.), The verb 'be' and its
synonyms. Part 5 (Foundations of Language Supplementary Series).
Doordrecht, Holland: Reidel.

Langendoen, D. Terence. 1967. The copula in Mundari. In J.W.M.
Verhaar (ed.), The verb 'be' and its synonyms. Part 1

Ó Coigneallaig, M. 1968. On verbs of being in Classical Armenian. In
J.W.M. Verhaar (ed.), The verb 'be' and its synonyms. Part 5.

Page, W. Sutton. 1934. An introduction to colloquial Bengali. Cambridge:
Heffer.

Palmer, F.R. 1965. Bilin 'to be' and 'to have'. African Language Studies,
6. 101-111.

Rūķe-Dravina, Velta. 1959. Zur Entstehung der Flexion in der Kinder-
sprache. International Journal of Slavic Linguistics and Poetics,
1/2. 203-222.

Sableski, Julia. 1965. Equational clauses in Bengali. Language, 41.
439-446.