Principles and Parameters Set Out from Europe

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1. The Opportunity Afforded (1980-1995)

The conception of universal principles plus finite discrete parameters of variation offered:
- The hope and challenge of simultaneously doing justice to both the similarities and the differences among languages.
- The discovery and expectation of *patterns* in crosslinguistic variation.

These were first presented with respect to "medium- sized" differences in European languages:
- The subjacency parameter (Rizzi, 1982)
- The pro-drop parameter (Chomsky, 1981; Kayne, 1984; Rizzi, 1982)

They were then perhaps extended to the largest differences among languages around the world:
- The configurationality parameter(s) (Hale, 1983)

"The more languages differ, the more they are the same"

Example 1: Mohawk (Baker, 1988, 1991, 1996)

Mohawk seems nonconfigurational, with no "syntactic" evidence of a VP containing the object and not the subject:
(1)　　a.　Sak wa-ha-hninu-'　　　　　ne ka-nakt-a'.
　　　　　　Sak FACT-3mS-buy-PUNC NE 3n-bed-NSF
　　　　b.　Sak kanakta wahahninu'
　　　　c.　Kanakta' wahahninu' ne Sak
　　　　d.　Kanakta' Sak wahahninu'
　　　　e.　Wahahninu' ne Sak ne kanakta'
　　　　f.　Wahahninu' ne kanakta' ne Sak
　　　　g.　Wahahninu' ne kanakta'
　　　　h.　Kanakta' wahahninu'
　　　　i.　Sak wahahninu'
　　　　j.　Wahahninu' ne Sak
　　　　k.　Wahahninu.
　　　　　　All: 'Sak/he bought a bed/it.'

There are also no differences between subject and object in binding (Condition C, neither c-commands the other) or *wh*-extraction (both are islands, no "subject condition") (Baker 1992)

Mohawk is polysynthetic (agreement, noun incorporation, applicative, causative, directionals…):
(2)　　a.　Sak wa-ha-nakt-a-hninu-'
　　　　　　Sak FACT-3mS-bed-Ø-buy-PUNC
　　　　　　'Sak bought the bed.'

b. Wa-sh-ako-t-ya't-awi-tsher-ahetkv-ht-v-'.
FACT-MsS-FsO-SRFL-body-wrap-NOM-be.ugly-CAUS-BEN-PUNC
'He made the thing you wrap around your body (a dress, a shirt) ugly for her.'

But the polysynthesis reveals the fundamental subject-object asymmetry in a new way:
(3)   a.   O-wir-a'a   wa-hra-k-e'   ne o-'wahr-u.
                N-baby-NSF FACT-MsS-eat-PUNC NE N-meat-NSF
                'The baby ate the meat.'

         b.   O-wir-a'a   wa-ha-'wahr-a-k-e'.
                N-baby-NSF FACT-MsS-meat-Ø-eat-PUNC
                'The baby ate the meat.'

         c.   *Wa-ka-wir-a-k-e'   ne o-'wahr-u.
                FACT-NsS-baby-Ø-eat-PUNC NE N-meat-NSF
                'The baby ate the meat.'

Compare English phrase structure; also compounds (*meat-eating*, *#baby-eating*).

Therefore there are many of Principles of Universal Grammar:
- The theta-criterion, projection principle
- The Uniformity of Theta-role Assignment Hypothesis
- The laws of movement: upward, structure preserving, local; compare V→T and T→C

Plus a small number of strategically-placed parameters:
- Head movement can apply to N→V (Baker 1988, 1996)
- Also whatever induces nonconfigurationality given super-rich agreement (Baker 1996)

Example 2: Kayardild

Evans and Levinson (2009) say that maybe no believer in UG would imagine that tense marking (etc.) would spread to elements of the clause other than the verb. *A difference, a parameter*.
(4)   Nyingka   kurri-nang.*ku*   niwan-*ju* balmbi-*wu*.
         2sg.NOM see-NEG-FUT 3sg-FUT   morrow-FUT
         'You will not see her tomorrow.'

But Evans (1995) observes that this marking spreads onto objects but not subjects, revealing a VP in this otherwise nonconfigurational-seeming language. *A similarity, underlying principles.*

"The more languages differ, the more they are the same"

2. The Promise Continues: A Current, Quotidian Example.

Chomsky (2000, 2001): Case and agreement are two sides of the same coin, reflexes of Agree
- Nominative case and subject agreement result from finite T in Agree with the closest NP.
- Accusative case and object agreement result from active v in Agree with the closest NP.

(One of) My current fascinations:
- Is this relationship between case and agreement universal or parameterized?
- Is there empirical support for the close connection between accusative case and object agreement in languages where both are overt, as there is for nominative case and subject agreement in English, Icelandic, Hindi, etc.?

Joining the story already in progress: Baker and Vinokurova (2010) on Sakha (Turkic)
- Nominative case and agreement on T are closely related
    - If the subject is dative, T agrees with the nominative object, or is default.
    - If the verb is nonfinite (T doesn't agree), the subject must agree with D and be genitive (in relative clauses, noun complements), or it must be null (PROarb).
    - Only one verb agrees with the nominative subject in constructions with auxiliary verbs as well as main verbs.
    - *Like familiar languages of Greater Europe (roughly) – Principles*
- Accusative case is not related to agreement with an active v
    - There is no overt object agreement anywhere in the language.
    - Passive verbs can have accusative themes, if an implicit agent is present.
        [Cup-ACC intentionally break-PASS-3sS.]
    - Agentive nominalizations have accusative themes
        [company-ACC manage-AG.NOM] 'The manager of the company'
    - "Raising to object" with unaccusative matrix verbs
        [Keskil [Aisen-ACC come-NEG-AOR that] become.sad-PAST.3sS]
        'Keskil became sad that/because Aisen is not coming'
    - Accusative on the objects of certain Ps iff the verb has a thematic subject.
    - *Unlike familiar languages of Greater Europe – a parameter?*

(5)   If there are two distinct argumental NPs in the same phase such that NP1
        c-commands NP2, then value the case feature of NP2 as accusative unless
        NP1 has already been marked for case.   (Developed from Marantz 1991)

Amharic: a language with both overt accusative case marking and overt object agreement

(6)   Ləmma   wɨʃʃa -w-ɨn   j-aj-əw-al.
        Lemma   dog-DEF-ACC   3mS-see-3mO-Aux(3mS)
        'Lemma sees the dog.'   (Amberber, 2005:299; Kramer, 2010:1; Leslau, 1995:186)

But the two do not pattern together closely in general.

NPs with accusative case but that cannot trigger object agreement:
(7)   a.   Ləmma wɨʃʃa-w-ɨn   j-aj-al.   (Definite objects, as an option)
             Lemma dog-DEF-ACC 3mS-see-AUX(3mS)
             'Lemma sees the dog.'

          b.   Mann-ɨn   ajj-ɨʃ?   (??ajj-ɨʃ-əw)   (Indefinite and quantified NPs)
             Who-ACC   see-2fS   see-2fS-3mO
             'Who did you (feminine) see?' (also WL:69)

          c.   Ləmma səw-u-n   hullu gabbəz-ə.   (*gabbəz-ə-w, *gabbəz-atʃəw)
             Lemma person-DEF-ACC every invite-3mS invite-3mS-3mO   -3pO
             'Lemma invived everyone.' (also WL:151, Amberber 2005:300)

          d.   Ləmma Aster-ɨn   hɪs'an-u-n   asaj-at.   (#asaj-ə-w)
             Lemma Aster-ACC child-DEF-ACC show-(3mS)-3fO   (*show-3mS-3mO)
             'Lemma showed Aster the baby.' (also WL:185, 191)   (Second objects of DOCs)

NPs that trigger object agreement but do not bear accusative case:
(8)   a.   Ləmma <u>l-almaz</u>   məts'əhaf-u-n sət't'-<u>at.</u>   Dative objects of DOCs
             Lemma DAT-almaz book-DEF-ACC give-(3mS)-3fO
             'Lemma gave the book to Almaz.'

          b.   <u>Aster</u> wɨʃʃa all-<u>at</u>   Nominative experiencers/
             Aster dog   exist-(3mS)-3fO   possessors
             'Aster has a dog.'

          c.   Aster bə-<u>mət'rəgiya-w</u> dədʒdʒ   t'ərrəg-əʧʧ-ɨbb-<u>ət</u>   Object of P with P
             Aster with-broom-DEF doorway sweep-3fS-with-3mO   doubled on V
             'Aster swept a doorway with the broom.'(Amberber 2002:56)

So object agreement and accusative case do not seem to be two sides of the same coin here.

Baker's (to appear) analysis: Object agreement
- F agrees with the closest NP probing downward: the goal (7d, 8a, 8b) or the theme (6).[1]
- This is subject to a phase-(like) condition, allowing agreement with goals/applied objects and shifted themes, but not with unshifted themes (7a-c) or objects of undoubled Ps (8c).
- It is not subject to the activity condition: (8a, c). (In terms of Baker 2008, this is a language with the Case Dependency of Agreement Parameter set "no".)

Where does Accusative case come from, if it is not assigned by F under agreement?
The same place it does in Sakha, a language without agreement. *It is dependent case.*

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[1] The bearer of object agreement is probably not active v in Amharic, because passive and unaccusative verbs can show object agreement with goal arguments (e.g. (8b)). This is notably different from Chichewa, Mohawk, Nahuatl and Mapudungun. More parameters (e.g. the locus of object agreement)!

(15)   If there are two distinct argumental nominals X and Y in the same *clause* such that X
       c-commands Y, then value the case feature of Y as accusative unless X has already been
       marked for case.

Some confirmation for this: ACC is available in passives of triadic verbs but not dyadic ones
(16)   a.   Ləmma gənzəb-u-n   sərrək'-ə-w.
            Lemma money-DEF-ACC   rob-3mS-3mO
            'Lemma stole the money.'

       b.   Gənzəb-u-(*n)   tə-sərrək'-ə.
            Money-DEF-(*ACC) PASS-steal-3mS
            'The money was stolen (from Aster).'   (cf. Amberber 2002:9, WL:187)

       c.   Ləmma Aster-ɨn   gənzəb-u-n   sərrək'-at.
            Lemma Aster-ACC money-DEF-ACC rob-(3mS)-3fO
            'Lemma robbed Aster of the money.'

       d.   Aster *ʃant'a-wa-n*   tə-sərrək'-ɨʧ-(*əw)
            Aster   suitcase-3fP-ACC PASS-rob-3fS-(*3mO)
            'Aster was robbed of her suitcase.' (also WL:187)

So we have different kinds of evidence that converges on the same parameterized principle of
accusative case marking in two quite different languages:
   •   Sakha, where there is no object agreement, seen in some fancy constructions.
   •   Amharic, where there is object agreement, but it doesn't pattern with accusative case.

Question arising: Is accusative case ever the result of object agreement in languages where they
are both overt (a parameter)? Or is accusative case fundamentally different from nominative in
how it is assigned in all relevant languages (a principle; cf. Bittner and Hale 1996)?

Tentative answer: Accusative case is parametrized—although it is not easy to find perfect cases!
Best so far: Mangarayi (Australian) (Merlan, 1982)

Overt accusative case and overt object agreement:
(17)   a.   Ŋawuyan-yiri+wa-ni jarbiñ-gayanŋan.   (p. 61)
            1sS/3pO-see-PC   young.man-ACC.PL
            'I saw the young men.'

       b.   Ŋali-na   ŋala-bugbug   wuran-jirag malam-gara-ŋan (p. 91)
            F.NOM-DIS F.NOM-old.person 3sS/3dO-eat man-DU-ACC
            'That old woman ate the two men.'

Amharic has ACC but not object agreement with indefinite and quantified objects ((7b,c)).
Mangarayi has agreement with these nominals as well:
(18)   a. <u>Ŋayaŋayag</u> <u>wuyanba</u>-bu-ni-wa.   (p. 96)
           Some   3pS/3pO-kill-PC-SUF
           'They killed some (people).'

       b. <u>Ŋiñjaŋ-gi-na</u>   <u>ŋan-gadugu</u>   <u>ña</u>-wu-na?   (p. 119)
           Who-SG-ACC F.ACC-woman 2sS/3sO-give-PP
           'Who did you give it?'   (AgrO is Ø. but FM's gloss, PL exists: Ŋiñja-ya-n-ŋan)

In contexts where Amharic has object agreement but not ACC case, Mangarayi has a match.

Agreement with accusative goals but not dative ones:
(19)   a. <u>ŋa</u>-<u>ŋiri</u>-j   wu<u>ŋya</u> <u>Ø-mawuj</u>.   (Agr with ACC DO, not DAT goal)
           1sS/3sO-bring   3pl.DAT ACC-veg.food
           'I brought them vegetable food.'

       b. <u>Wuyanba</u>-wu-na [pro.3pl] Ø-garag   Ø-<u>ŋanan</u>.   (Agr with ACC goal)
           3pS/3pO-give-PP (them)   ACC-much ACC-money
           'They gave them plenty of money.'

Experiencers that trigger object agreement also get nominative case:
(20)   a. <u>L</u>arg   ga-<u>ŋan</u>-daya.   (p. 60)
           Be.cold   3-1sO-AUX
           'I'm cold.' (Object agreement)

       b. <u>Ø-malam</u>   <u>l</u>arg   ja-<u>Ø</u>-<u>d</u>aya.
           M.ACC-man be.cold   3-3sO-AUX
           'The man is cold.'

Contrast Amharic:
(21)   <u>Aster</u>   bərrəd-<u>at</u>.   (Amberber, 2002:22)
          Almaz   be.cold-(3mS)-3fO
          'Almaz is cold.'   (also WL:435, Amberber 2005:308, RK:9n. 8)

The match between accusative and object agreement is much closer in Mangarayi than in
Amharic, in a cluster of ways that may be related in terms of a parameter:
(22)   Accusative case is assigned:
      • Via agreement with functional head F, F lower than T and the subject (Mangarayi)
      • Via a rule of dependent case assignment (Amharic, Tamil)

(One anomaly: ACC on the theme of a ditransitive verb that only agrees (overtly) with the goal.)
(23)   Wuyanba-wu-na [pro.3pl] <u>Ø-garag</u>   <u>Ø-ŋanan</u>.
       3pS/3pO-give-PP (them)   ACC-much ACC-money
       'They gave them plenty of money.'

3. So where are we now with respect to principles and parameters?

The principles have been vindicated, and are alive and well (details always evolving).

The parameters need some help:
- The minimalist ethos puts pressure against them, at least in the classical sense.
- The fascination of microcomparative work (and single-language studies) can distract attention from them (because that can be really interesting too).

Key empirical question: Are there larger scale patterns in crosslinguistic variation?
- We should hope so: more constrained, potential benefits for learning.
- We should aim not only for beautiful theories, but for beautiful analyses of languages.

List of possible cases from my own quest:
- The symmetrical object parameter: Kinyarwanda and Chichewa.
    - Languages can have {1, more} "objects" (=structural Acc case; Baker 1988)
- The Polysynthesis Parameter (Baker, 1996)
    - Languages {must, need not} express all theta-roles as morphemes on the verb.
- The case dependence of agreement parameter (Baker, 2008)
    - Functional heads {must, need not} assign case to an NP they agree with.
- The direction of agreement parameter (Baker, 2008)
    - The goal of agreement {must, need not} c-command the agreeing head.
- Parameterization in the minimal link condition (Baker & Collins, 2006)
    - {The closest, any} NP can move into the Specifier of a functional head.
- Parameterization in the Case filter, whether NPs have case (Diercks, to appear)
    - NPs {are, are not} generated with an unvalued case feature.
- Parameterization in how case is assigned (Baker & Vinokurova, 2010)

Notable examples from other work:
- Head initial versus head final languages (base generated or derived by movement).
- Verb raising to Tense, in all tenses, or in none (Pollock, 1989).
- Wh movement, for all wh-words, or for none (+/- why, etc.) (Huang, 1982)
    - *And so on.*

Collecting a fuller range of good cases should help with the high-level theoretical work of discerning what can be a parameter and why (e.g. Rizzi, today).

My conclusions for how we proceed:
- It is already feasible to compare unrelated languages in an interesting way. This is possible because of the universal principles, which constrain crosslinguistic variation so that the dangers of incomparability and undiscernable interfering variation are not so dire.
- We should remain open to the possibility of deeper/more extreme parameterization, at least until we know more about crosslinguistic syntactic variation at the highest level.
- There is some reason to think that there are broad patterns in crosslinguistic variation, pointing toward the existence of higher order parameters (and we should relish them).

- We need to be doing comprehensive generative analyses of large fragments of languages from across the range of attested crosslinguistic variation, the fruits of which have undeniable descriptive value. [No one else will.]
- We need to work toward building a better typology on the results of these language-particular analyses.

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