The Significance of What Hasn’t Happened
Theresa Biberauer & Ian Roberts
University of Cambridge
mtb23@cam.ac.uk, igr20@cam.ac.uk

Introduction: the generative approach to diachronic syntax

• The goal of diachronic syntax – and, indeed of historical linguistics more generally – is to document and analyze recorded instances of change.

(1) a. word-order change (OV > VO: English, Latin > Romance, etc); b. null subjects: loss of in 17th-century French, gain in Veneto, etc.; c. loss of V-to-T movement in Early Modern English; d. loss of overt wh-movement in Old Japanese; e. passive-to-ergative shift in Indo-Iranian.

(2) Since 1980, syntactic change viewed as parametric change, i.e. change in the value (vi > vj) for a given parameter Pi.

(3) a. change of head parameter (V follows its complement > V precedes its complement)/loss of leftward-movement of complement(s); b. T gains/loses ability to “license pro,” perhaps due to earlier/concurrent morphological change; c. T loses the ability to attract a lexical verb (again perhaps connected to a morphological change); d. C loses the ability to attract a wh-DP; e. passive agent marking reinterpreted as ergative; passive participles reinterpreted as active.

• But how exactly does change occur?

(A population of) language acquirers converge on a grammatical system which differs in at least one parameter value from the system internalised by the speakers whose linguistic behaviour provides the input to those acquirers (cf. Lightfoot (1979, 1991, 1999)).

• (Abductive) reanalysis of Primary Linguistic Data (PLD) in language acquisition may lead to resetting parameter values of the underlying grammar

• Since acquisition is mostly convergent (in fact, assumed to be always convergent in most of the L1 literature), we expect that little will change.

it is generally assumed that children acquire their .. target .. grammars without error. However, if this were always true, .. grammatical changes within a population would seemingly never occur, since generation after generation children would have successfully acquired the grammar of their parents.

(Niyogi & Berwick (1995:1))

(4) a. Convergent acquisition: for every Pj,i, the value vi,i of Pj in the acquirers’ grammar converges on that of Pj in the grammar underlying the PLD;

b. Syntactic change: at least one P in Pj,i has value vi in the acquirers’ grammar and value vj in the grammar underlying the PLD.

(5) Failure of universal instantiation:

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Most of the time, most parameter values don’t change.

The Inertia Principle:
Things stay as they are unless acted on by an outside force or decay.

(Keenan (2002:2))

“syntactic change should not arise, unless it can be shown to be caused”
(Longobardi 2001:278, emphasis his)

Point of talk: in order to seriously understand both change and the nature of parameters, we need to qualify both occurrences of most in (6).

- Which parameters change and when?
- Are certain parameters more amenable to change than others?
- If so, what can we learn about parameters more generally from these changes?
- The cases where a given parameter does not change can be as revealing as those where it does.

1. Some apparently highly stable parameter values

- Certain syntactic features of certain languages/families are extremely stable, as far as the record shows:

a. (Multiple) Incorporation in the Algonquian languages (Branigan 2012);

b. Harmonic head-final order in Dravidian (Steever 1998:31), and Japanese/Korean;


Concerning (8a), according to Goddard (1994) and Branigan (2012), Proto-Algonquian was spoken 2000-3000 years ago. In that time numerous structural, lexical and phonological features have changed, but incorporation has remained as a “signature” property of the family

(9) Assume (for concreteness) a new generation of native speakers emerges every 25 years. → in 3000 years we have 120 iterations of the learning cycle.

- On (8b), Proto-Dravidian is dated by Seever (1998) to 4000BC, i.e. 6000 years ago, so this parameter has remained constant over roughly 240 iterations of the learning cycle.

- The oldest texts in Japanese date from around 700-800AD, and so are over 1000 years old, again showing conservation of head-finality and radical pro-drop over 40 iterations (the relevant evidence on Old Korean shows the same; see Lee & Ramsey 2011:55).

- On (8c), Japanese and Korean have shown radical pro-drop throughout their history → at least 40 iterations

Q: Are these (head-directionality, radical pro-drop, polysynthesis) macroparameters?

Definition of a parameter:
“Parameters” arise from underspecification of formal features in UG, e.g.

a. association of formal features with (functional) heads

b. values of formal features, triggering Agree

c. features triggering movement (Internal Merge)

• Parametric variation emerges where UG doesn’t mind (Biberauer & Richards 2006).
Definition of a macroparameter:

For a given value $v_i$ of a parametrically variant feature F, all functional heads of the relevant type share $v_i$.

- For head-directionality, all heads; for radical pro-drop, all probes; for polysynthesis, all incorporation triggers (in Roberts 2010a = all probes).

We observe, then, three cases, each independently thought to be macroparameters, which are conserved for millennia.

2. Relatively short-lived parameter settings.

2.1 English modals

- It is well-known that the class of English modals emerged through grammaticalisation in the 16th century (Lightfoot 1979, Warner 1983, Roberts 1985, Roberts & Roussou 2003).
- However, in contemporary English, less than 500 years later, many of the modals are moribund:

(12) a. Archaic forms recently gone out of normal UK usage:

You shall do this for me (except in Northern UK??)
Shall you miss your train? (1862, see Denison 1998:168)
But I dare say he [would be able to] come if he would [wished]
(1816, Jane Austen; Denison 1998:168)

b. Forms which sound “quaint” to me (middle-aged speaker of northern-influenced UK English):

We usen’t (to) do that.
Mayn’t we go out to play now? No you mayn’t.
Might/may it rain tomorrow?
It mightn’t/mayn’t/may not rain tomorrow.

c. Forms which are ok for me, but unnatural for Americans:

Must we?
We mustn’t.

- In the inversion cases above, the relevant parameters concerning attraction of T by interrogative C are relativised to individual lexical items.
- Cf. also well-known restrictions on “conditional inversion” in contemporary English:

(13) a. Had I been rich, everything would have been ok.
b. Should he do that, everything will be ok.
c. *Did I do that, everything would be ok.
d. ?Were I/he to do that, ...
e. *Were I rich, ...
f. If I were rich, ...

b. And could I read yours [face], I’m sure I should see. (1864: Denison 1998:298)
c. And were she a little less giddy than she is ... (Dickens 1843-4; Denison *ibid*)
irrealis C attracts only certain lexical items
the development of the modals, as a typical case of grammaticalisation, was a case of **microparametric** change;
the breakdown of uniform syntactic behaviour in the class, on an almost item-by-item basis, is **nanoparametric** change.

(15)  

a. Definition of a microparameter:
For a given value \( v_i \) of a parametrically variant feature F: a small subclass of functional heads (e.g. modal auxiliaries, pronouns) shows \( v_i \).

b. Definition of a nanoparameter:
For a given value \( v_i \) of a parametrically variant feature F: a single lexical item shows \( v_i \).

• The class of modals was introduced by a microparametric change (in fact, grammaticalisation is always micro- or nanosyntactic parametric change);
• The modals seem to have started to change in the 18th century, 200 years ago, i.e. a mere 8 iterations of the learning cycle, after their creation as a separate class.

2.2 Subject-clitic systems of North-Western Romance (Northern Italy, France, Switzerland)

(16) Basic pattern of development:
Pronouns: Strong subject pronouns > weak subject pronouns > syntactic clitics
Pro: Full NSL > restricted NSL > non-NSL > NSL again

Latin/rest of Rom > OF/Med NIDS > literary Fr/16thc NIDs > “advanced” Fr/NIDs

(17) Strong subject pronouns in Old French:

a. Et je que sai? (Tristan; Roberts 1993:112)
b. e jo e vos i irum (Roberts 1993:113)
c. se je meïsmes ne li di (Roberts 1993:114)

(18) Null subjects and V2 in Old French:

a. Tresqu’en la mer **cunquist** la tere altaigne.
Until the sea conquered-3sg the land high (Roland, 3)
“He conquered the high land all the way to the sea”

b. Si **chaï** en grant povreté.
Thus fell-1sg into great poverty (Perceval, 441)
“Thus I fell into great poverty.”

c. Si en **orent** moult grant merveille
Thus of-it had-3pl very great marvel (Merlin, 1)
“So they wondered very greatly at it.”

(19) a. Ainsi s’acorderent que il prendront par nuit.
Thus they-agreed that they will-take by night
“This they agreed that they would take by night …”
b. dont la joye fut tant grant par la ville qu’elle ne se pourroit compter
of-which the joy was so great in the town that it neg self could count
“the joy concerning which was so great around town that it could not be counted”
(Jehan de Saintré 160, 5; Sprouse & Vance (1999:263))


(20) Modern French, based on Roberts (2010b) and Zribi-Hertz (1994):
(i) “high” registers (français standard moderne in Zribi-Hertz (1994:136)):
allow stylistic inversion, complex inversion and subject-clitic inversion: fully null-subject in CP;

(ii) registers not allowing stylistic inversion, but allowing complex and subject-clitic inversion: non-null-subject in TP, consistently null-subject in CP;

(iii) colloquial registers in which all forms of inversion and are lacking: fully non-null-subject systems (Zribi-Hertz’ (1994:137) français parlé courant);

(iv) the variety/varieties illustrated in (21) in which subject proclitics are to be analysed as realising φ-features of T rather as in some Northern Italian dialects: fully null-subject in TP.

Zribi-Hertz (1994:137) refers to as français très évolué (FTE, or “very evolved French”) subject proclitics are to be analysed as realising φ-features of T rather as in certain Northern Italian dialects and Valdôtain, as we saw in Section 2.2 and 2.3. This is shown by the fact that they cooccur with non-referentially quantified subjects, as in the attested examples in (45):

(21) Zribi-Hertz (1994:137) français très évolué:

a. Tout le monde il est beau, tout le monde il est gentil. (film title)
   Everyone he is handsome, everyone he is nice
   “Everyone is handsome, everyone is nice.”

b. Personne il fiche rien, à Toulon.
   No-one he does anything at Toulon
   “No-one does anything in Toulon.”
   (Zribi-Hertz’ (19a, e), p. 137); (67b) from P. Mille Barnavuax et quelques femmes, 1908)

(22) Conjugaison interrogative (Pollock 2006, Roberts 2010b): enclitic subject pronouns have a different status → φ-features realised differently on C and on T.

(23) N Italian (Veneto) shows a similar difference between proclitics and enclitics (C and T):

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(Poletto (2000:54))

See also Manzini & Savoia (2005) on the synchronic range of systems featuring extreme microparametric variation concerning which clitics have reanalysed from their earlier pronominal status to functional heads in T and C systems Again, these systems appear to have emerged quite recently (since the 17th century).
• Hard to date changes in non-standard varieties of French due to normative influence, but NIDs suggest that the intermediate stages were short-lived (as does OF) – probably a couple of centuries for each stage post-full NSL (on which see below), i.e. around 8 learning cycles.

2.3 Jespersen’s Cycle (see Willis, Breitbarth & Lucas 2013)

(24) “Jespersen’s Cycle” of negation in French:
  a. OF: jeo ne dis
  b. Standard French: je ne dis pas
  c. Colloquial French: je dis pas

(25) 15th/16th-century French:
  a. un moyne … ne laboure comme le paisant, ne garde le pays comme a monk … doesn’t work like the peasant, not guards the country like l’homme de guerre, “a monk … doesn’t work like the peasant, doesn’t protect the land like the soldier (Rabelais Gargantua (ed Calder, Droz 1970, p. 229); Ayres-Bennett (1996:143))
  b. je vou croi pa
     (Ayres-Bennett (1996:216f.), from the journal kept by Jean Héroard in the period 1601-28 of the speech of the young dauphin Louis XIII. Héroard, who was the dauphin’s personal physician, transcribed samples of the dauphin’s speech between the ages of 3;3 and 9;3 (i.e. in the years 1605-10))

• If Rabelaix (early 16th-century) really had Stage I, then the evidence of Stage III from the dauphin in 1605-10 indicates that Stage II may have lasted less than a century
• the fact that Stage II has survived several centuries in Standard French is plausibly due to normative pressure.
• Further, the earlier preverbal negator functions as a polarity-emphasis marker West Flemish (Breitbarth & Haegeman 2010):

(26) a. Ik en kennen dat niet
    I EN know that not
    “I don’t know that (contrary to what you think)”

    b. Dienen boek nie (*en)-kennen is oast onmeugelijk
       that book not EN-know.INF is near impossible
       “To NOT know that book is almost impossible”

         - And we observe similar “post-Stage II” uses of the initial negation element in other West Germanic languages (cf. Breitbarth 2009) and also in French (Rooryck 2008). (Interestingly, the innovated negation element can be put to the same uses, even while it serves a stable concording function; cf. Biberauer 2009 on Afrikaans)

We observe values of microparameters, affecting very small classes of lexical items, undergoing rather frequent change.

Note that the same formal operations are involved in our examples: head-movement (incorporation, T-to-C) and licensing null arguments (radical pro-drop, subject clitics). The different kinds of parametric variation concerns how these same formal operations “distribute” over the functional heads.
3. Intermediate cases

(27) Definition of a mesoparameter:
For a given value \( v_i \) of a parametrically variant feature \( F \):

**Mesoparameters**: all functional heads of a given naturally definable class, e.g. [+V], share \( v_i \).

- Mesoparameters concern entire syntactic categories and, as such, are “smaller” than macroparameters (which concern all possible categories), but “larger” than microparameters (which affect subclasses of lexical items).
- E.g. the null-subject parameter, as manifested in Latin and (most) Romance:

(28) \( T \) {has/lacks} the capacity to “license” pro in its Specifier:
- affects all (finite) subjects
- stable from Latin through most of the recorded histories of Italian, Spanish and European Portuguese (except Brazilian since ca1900).
- North-West Romance (see §1.2.2) may have changed under Germanic influence

- Another likely case is (root) V2 in Germanic (although its diachrony is obscure and the evidence from Gothic, Old High German and Old English suggests it was not present in Proto-Germanic; see Walkden 2014).

(29) Root declarative C attracts V and has an Edge/EPP Feature:
- Affects all verbs
- V2 has remained remarkably stable across nearly all North and West Germanic varieties, with English changing in the 15th century for obscure reasons (cf. Kroch & Taylor 1997 for the suggestion that this was caused by contact).

4. Parameter Hierarchies and Parameter Change

It is possible to isolate three classes of parameter: macro, meso and micro.

(30) A rough taxonomy:
For a given value \( v_i \) of a parametrically variant feature \( F \):

a. **Macroparameters**: all functional heads of the relevant type share \( v_i \);

b. **Mesoparameters**: all functional heads of a given naturally definable class, e.g. [+V], share \( v_i \);

c. **Microparameters**: a small subclass of functional heads (e.g. modal auxiliaries, pronouns) shows \( v_i \);

d. **Nanoparameters**: one or more individual lexical items is/are specified for \( v_i \)

Following the general view of parametric change as involving (abductive) reanalysis of PLD through language acquisition:
- **macroparameters** must be “easily” set; hence they resist reanalysis and are strongly conserved.
- **meso- and microparameters** are correspondingly less salient in the PLD (nanoparameters still more so; these are like irregular verbs, item-specific specifications which override the default by the Elsewhere Condition).

The different kinds of parameters are hierarchically related to one another:
(31) **Word order:**

Is head-final present?

No: head-initial

Yes: head-final

Yes: head-final

No: present on [+/-V] heads?

Yes: head-final

No: present on ...

in the clause/nominal only

- NB “head-final” can be reduced a complement-movement feature, following the general approach in Kayne (1994) or to a PF head parameter as discussed by Richards (2004) and Sheehan (2013).
- The hierarchies are emergent; the features themselves may also be emergent (see Biberauer 2011, this conference).

(31) True macroparameters sit at the top of the network. As we move successively down:

- Systems become more marked
- Parameters become meso then micro then nano
- Parameters have a longer description (the conjunction of all the “nodes”)
- Parameters are further along a learning path
- Systems become diachronically closer

(See Sheehan 2014a,b, to appear, for examples of hierarchies relating to case/agreement alignment, causatives and ditransitives; Biberauer 2014, this conference, for a negation and number hierarchy, and Bazalgette, in progress, for a focus hierarchy and a formalisation of an algorithm to create and search hierarchies).

**Macroparameters** may be set at a stage of acquisition at which categorial distinctions have yet to be acquired, and hence their nature may be due to the “ignorance” of the learner (Biberauer 2011, Branigan 2012).

As categorial distinctions emerge, **mesoparameters** become available, refining the early acategorial system. As functional categories emerge, **microparameters** become possible.

- This view then explains how “superset” parameters can be set early without a “superset trap” arising; hence it is consistent with the Subset Principle (cf. Berwick 1985, Biberauer & Roberts 2009).

**A note on macroparametric change and Indo-European:** NB we are not proposing that macroparameters cannot change at all (this view would be incompatible with the principle of connectivity). Word-order change can observed in every branch of IE for which we have records:

- Germanic (NGmc and English: OV > VO)
- Latin/Romance OV > VO
- Greek (Homeric > Classical OV > VO; Taylor 1990)
- Celtic (Continental Celtic was probably OV; insular all VSO (Russell 1995))
- Indic (loose > rigid OV, under Dravidian influence)
- Iranian (OV > VO reversed in Medieval period under Turkic influence, giving numerous mixed orders)
If PIE was fully head-final (which has often been supposed; see Fortson 2004:142-3), then this can be interpreted to show that the macroparameter for word order can change. However, there is evidence that the older languages all showed a similar system in which head-finality was attenuated in various ways:

(32) a. OV with “leaking”
    b. 2nd-position effects
    c. initial relative pronouns
    d. argument-fronting to topic and focus positions in the left-periphery

• Initial Cs, on analogy with relatives (Kiparsky 1995) may have destabilised the earlier harmonic system, so here grammaticalisation (of earlier nominal elements) may be at work
• Presumably, sufficiently intensive contact can lead to change in these parameters too: the evidence of head-initial to head-final change in the Southern Semitic languages under intensive contact with Cushitic may be an example (cf. Leslau 1945).

5. Conclusions

Not all parameters are diachronically equal; and these inequalities can tell us something important about variation generally. Once again, language change gives us an important window on the nature of language.

And, like Sherlock Holmes, we must pay attention to dogs that don’t bark.

REFERENCES


