

The Many Priests in Kafka's Temple: How Speakers, Linguists, and Prescriptivists 'Do Things With Junk'

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David Fertig

Department of Linguistics and Center for Cognitive Science

University at Buffalo (SUNY)

fertig@buffalo.edu

Explaining my title (1)

- "Leoparden brechen in den Tempel ein und saufen die Opferkrüge leer; das wiederholt sich immer wieder; schließlich kann man es vorausberechnen, und es wird ein Teil der Zeremonie." (Franz Kafka. Die Acht Oktavhefte. <http://gutenberg.spiegel.de/?id=5&xid=1358&kapitel=1>)

Explaining my title (2)

- Roger Lass. 1990. “How to Do Things with Junk: Exaptation in Language Evolution.”

Central questions of linguistics:

- 1) How are we to account for (apparent) order / structure / patterns / regularities in language?
- 2) How are we to account for (apparent) disorder / anomalies / exceptions / irregularities ("leopards", "junk") in language?

Possible answers to both questions:

- We can account for “order” and/or “disorder”:
- 1) Synchronically/cognitively (in terms of properties of the human mind, which might or might not be specific to language)
- 2) Diachronically (in terms of the cumulative effects of language change)
- 3) Or through some kind of combination of 1) and 2)

A popular answer in much 20th-century linguistics:

- Order/structure/system is a synchronic/cognitive matter (to be accounted for in terms of “Universal Grammar”, and/or “Naturalness”, etc).
- Disorder/exceptions/irregularities are a diachronic matter (“historical residue”).

An old view making a big comeback: It's all diachronic.

- (Apparent) synchronic language "structure" (with all its "universals" and "naturalness preferences") is an epiphenomenal by-product of language change. Every aspect of the synchronic state of a language is "historical residue".

Paul (1886):

- "Es ist eingewendet, dass es noch eine andere wissenschaftliche betrachtung der sprache gäbe, als die geschichtliche. Ich muss das in abrede stellen. Was man für eine nichtgeschichtliche und doch wissenschaftliche betrachtung der sprache erklärt, ist im grunde nichts als eine unvollkommen geschichtliche, unvollkommen teils durch schuld des betrachters, teils durch schuld des beobachtungsmaterials. Sobald man über das blosse constatieren von einzelheiten hinausgeht, sobald man versucht den zusammenhang zu erfassen, die erscheinungen zu begreifen, so betritt man auch den geschichtlichen boden, wenn auch vielleicht ohne sich klar darüber zu sein." (19-20)

Saussure (1915 [1962]):

- "[...] tout ce qui tient au système linguistique, est une disposition de termes, un résultat fortuit et involontaire de l'évolution." (123)
- "[...] tout vient d'un pur accident. La langue est un mécanisme qui continue à fonctionner malgré les détériorations qu'on lui fait subir." (124)

Bybee et al. (1994)

- "[...] we regard 'system' or 'structure' to be epiphenomenal rather than basic to the nature of grammatical substance and exponence. [...] It should be clear now that rather than studying the 'structure' of grammatical expression in a language, we advocate the study of the way that grammatical meaning and expression are attained across languages as a way of understanding the inherent properties of natural language" (22)
- "[...] in our view the real insights into human language come not from examining the synchronic iconicity, but more from understanding the dynamic processes that create that iconicity." (106-7)

Lass (1997), 1:

- "[...] history is normally so contingent that the most extraordinary garbage left behind by historical change can remain stable for millennia" (12 fn. 9)
- "[...] how much of what looks like (synchronic) structure really is, and how much is rather detritus left behind by historical processes, that even if they leave notable residues have no particular present relevance [...]? Perhaps some significant part of linguistic structure has nothing at all to do with mind or semiosis, but derives simply from a kind of recipient's inertia. Speakers just accept a good piece of what's there already, because linguistic systems (whatever else they may be) are historical givens." (12)

Lass (1997), 2:

- "Portions of apparent 'synchronic' states are relics of the historical processes that brought them into being, evolutionary scars on the present-day body. The two dimensions [sc. synchrony and diachrony] are complementary, but in the end history probably has more to say about synchrony than the other way round." (14)
- "if something can be explained genetically as an 'inertial' survival of a contingent historical event, does it need a synchronic explanation as well? My guess would be that it doesn't, and if one of the two is otiose it's the synchronic one." (383)

Juliette Blevins (2004)

- "In all cases where clear diachronic explanations exist for a particular synchronic pattern, this diachronic explanation makes a synchronic account redundant, [...]." (5)
- "synchronic sound patterns are best understood in terms of their diachronic origins." (71)
- "the primary explanation for a synchronic sound pattern is historical." (81)

What I like about this “neo-neogrammarian” position, 1:

- It acknowledges the "leopards" in the temple.
- Compare: "The basic problem for any approach to language change is what Eugenio Coseriu has termed the paradox of change: if synchronically, languages can be viewed as perfectly running systems, then there is no reason why they should change in the first place." (From the blurb on the Benjamins website for Detges and Waltereit 2008.)

What I like about this “neo-neogrammarian” position, 2:

- It dispenses with any fundamental distinction between “natural” and “unnatural” aspects of a language (“system” vs. “historical residue”, “core” vs. “periphery”, etc.)

The problem I have with the neo-neogrammarian position:

- It treats the “leopards” as the whole story: “Leoparden brechen in den Tempel ein und saufen die Opferkrüge leer; das wiederholt sich immer wieder”
- It disregards (or at least underestimates) the significance of the synchronic/cognitive dimension in shaping language (sub)systems: “schließlich **kann man es vorausberechnen**, und es wird ein Teil der Zeremonie.”
- Key question: Who is this “**man**”? Who are the “priests” in Kafka’s temple?

Some thoughts on "(un)naturalness" and "(dis)order" in morphology

- A widespread view: A "maximally natural", "ideal", "optimal" grammatical system would have:
 - perfect one-to-one correspondence between form and function/meaning (syntagmatically and paradigmatically), i.e.
 - no allomorphy/synonymy
 - no syncretism/homonymy
 - no inflectional classes/irregularity/suppletion
 - no multiple exponence
 - no combined (cumulative) exponence
 - perfect segmentability into discrete biunique morphemes

In other words:

- a "perfect" grammatical system would have no (paradigmatic) structure:
 - no patterns, no regularities, no predictability, no "order"
 - it would be an unstructured morpheme set (of minimal size).

My favorite "paradox":

- perfect regularity = no regularity (at least paradigmatically)
- a "perfect" system is a maximally small system at "equilibrium" [maximal disorder/entropy within the system]
- "Optimal morphology" = no morphology [Cf. Aronoff (1998:413): "Morphology is inherently unnatural".]
- Order/structure comes only with complexity ("imperfection"). An optimally simple system is one that has had all the structure squeezed out of it.

The good, the bad, and the ugly?

- “Worst” possible system: a big mess
- “Best” possible system: a very small “mess”!
- In between, we get order/structure.

Toward a “Kafkaesque” approach to morphology (1)

- This approach rejects both:
- 1) The "minimalist" aesthetic of much 20th century linguistics, which holds that we get at the essence of grammar by squeezing out all of the paradigmatic structure from the system.
- 2) The "junkpile" (anti-?)aesthetic that regards all synchronic structure as "epiphenomenal" "garbage left behind by historical change".

Toward a “Kafkaesque” approach to morphology (2)

- Garbage is constantly intruding upon grammatical systems, but speakers never “just accept” the garbage. They filter it, categorize it, discern simple and complex patterns in it, and extend those patterns. They integrate the garbage into the system, and this integration may trigger restructuring of some aspects of the system.
- In other words, speakers are constantly “do[ing] things with junk”.

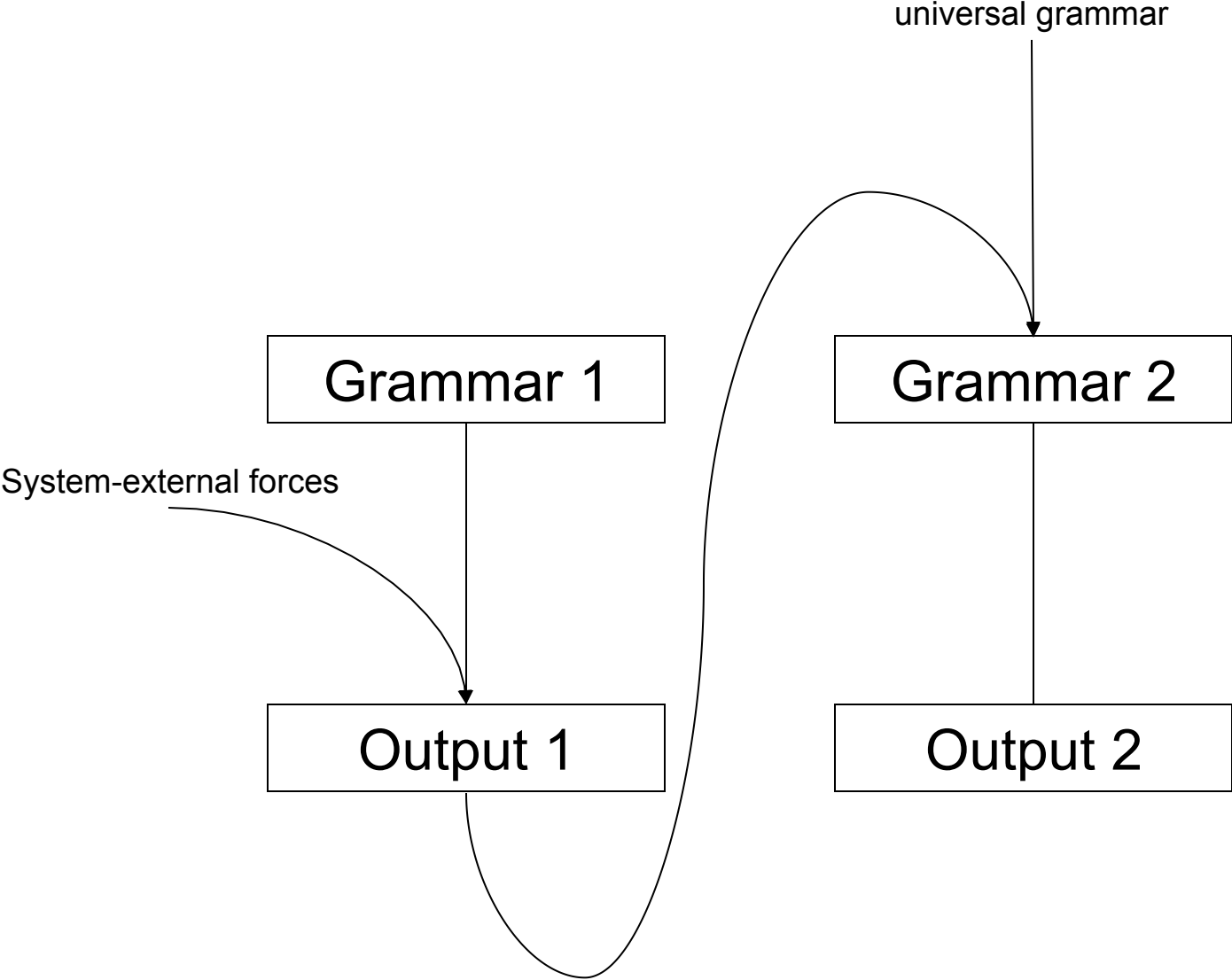
Toward a “Kafkaesque” approach to morphology (3)

- The continual interaction of junk, system, and cognition sometimes produces quite elaborate paradigmatic structure.
- Every aspect of a system participates in this structure to some degree. Nothing can be written off as pure residue.

Interdependence of synchrony and diachrony

- To fully account for synchrony, we must look to diachrony.
- To fully account for diachrony, we must look to synchrony.
- At least in morphological change, it is the (linguistically and cognitively) most interesting aspects of diachrony that are highly dependent on synchrony (and cognition).

Familiar model of grammatical change (e.g. Andersen 1973)



Enhanced model of grammatical change

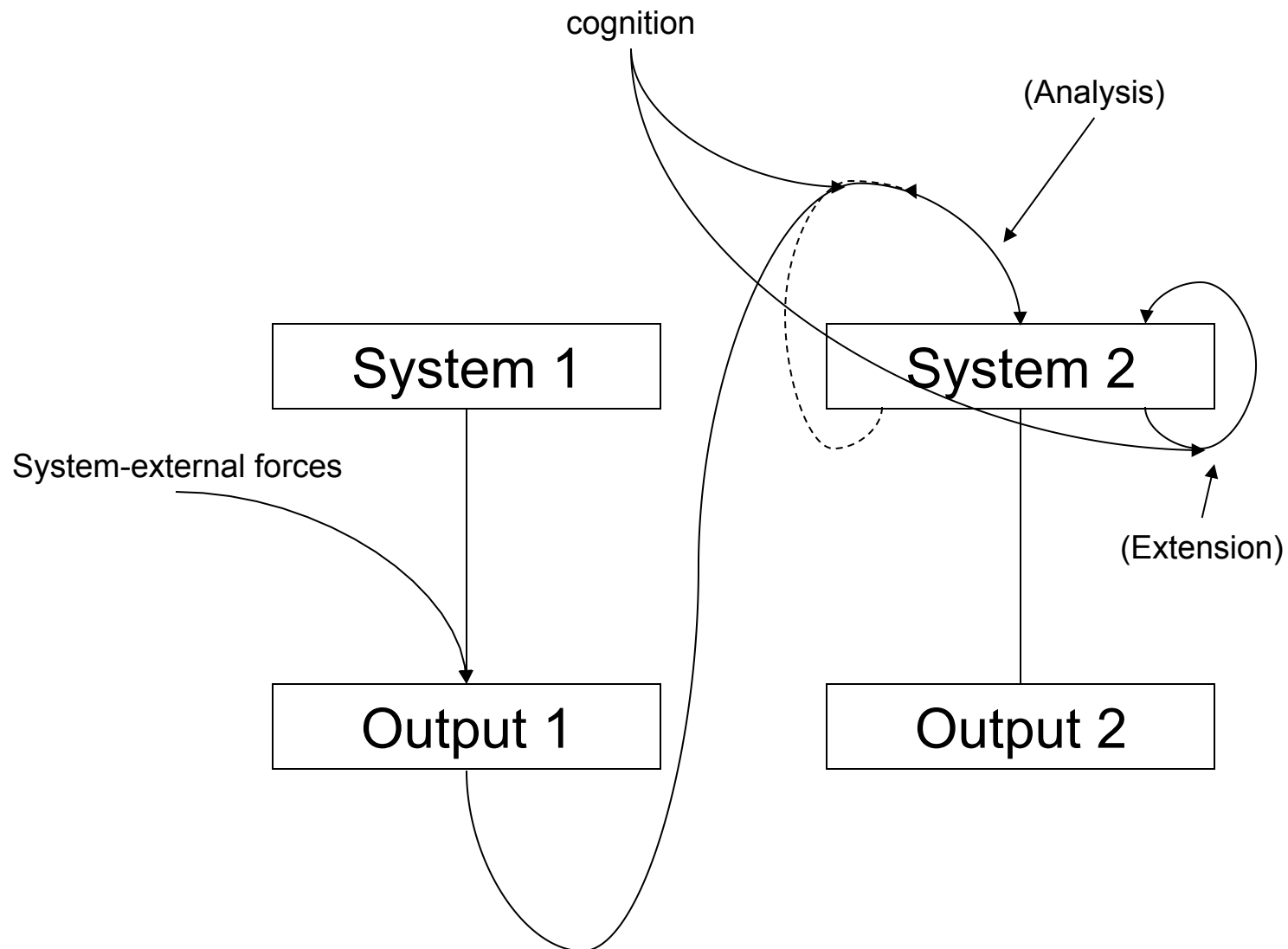


Illustration of the role of complex paradigmatic structure in morphological change:

- Regularization and irregularization in words derived by conversion.

The Conversion-Regularity Effect (CRE) (1)

- aka “Regularization-Through-Derivation Effect” (Kim et al. 1991):
- Words formed by conversion (category-changing zero-derivation) are (or tend to be?) inflectionally regular.

The Conversion-Regularity Effect (CRE) (2)

- The regularity of conversion words is supposedly remarkable and in need of explanation when their phonological shape would lead us to expect them to be irregular, e.g.:
 - *he braked/*broke* (in spite of homophonous *break*)
 - *he kinged/*kung* my checkers piece (in spite of irregularity of all non-derived verbs ending in *-ing*)

Is the CRE Exceptionless?

- **Prediction of exceptionlessness:**
 - "the regularization-through-derivation effect is [...] probably exceptionless" Kim et al. (1991:180n.1)
 - The dual-mechanism account of the CRE in terms of "abstract morphological structure" (Kim et al. 1991:209; cf. Pinker 1999:168-174), whereby "words are represented as morphological tree structures reflecting their derivation from basic word roots" (Kim et al. 1994:174) would indeed seem to predict exceptionlessness.

Attested exceptions to the CRE (1): Standard English

- ***string-strung*** (Kim et al. 1991)
- ***spring-sprung*** (denominal): "Most of us don't think of **sprung** saddles on our modern bicycle, but BROOKS springs provide a good suspension at a reasonable cost." <http://www.wallbike.com/Brooks.html>
- ***sling-slung*** in various denominal senses [OED], e.g. "Monitor the fingers of the **slung** arm regularly for circulation, sensation and motion." http://www.ehow.com/how_8311_splint-fractured-collarbone.html
- ***ring-rung*** 'put a ring in the nose of (livestock)', 'put an iron band around (a wheel)', etc. [OED, sv. *ring* v. 1]
- ***shoe-shod-shodden; saw-(sew)-sawn; wet-wet***

Attested exceptions to the CRE (2): English dialects

- *skin-skun/skan* [<http://www.dooryard.ca/skun.html>]
- *snow-(snew)-snown*
- *heat-het-heaten*

Attested exceptions to the CRE (3): other English

- ***sled-sled*** "Nolan Blair, 4, tried to avoid getting a face full of snow as he **sled** down the hill [...]" http://66.73.209.89/detail.asp?pid=as_FEA_SnowDay2a_121505.jpg
- ***slow-slow*** "This meant that the leader, Steve Williams, should have **slow** down to around 50mph to act as a pace car [...]" <http://www.mgcars.org.uk/racing/bcv8.htm>
- ***ding-dung*** "My board's all dung up." <http://www.pbs.org/speak/words/trackthatword/ttw/?i=211>

Attested exceptions to the CRE (4): standard German

- ***gleichen-glich-geglichen*** 'to be (a)like, be the same' < adj. ***gleich*** '(a)like, the same'
- Same irregularization has occurred in Yiddish (***glaykhn***) and Dutch (***(verge)lijken***)

Attested exceptions to the CRE (5): German dialects

- ***bluten-gebluten*** 'to bleed' < *Blut* 'blood'
- ***ringen-gerungen*** 'to put a nose ring on (a pig)' < *Ring* 'ring'

Attested exceptions to the CRE (6): Dutch

- ***stijven-steef-gesteven*** 'to starch (laundry)' < *stijf* 'stiff'
- ***fluiten-floot-gefloten*** 'to whistle, play on a flute' < *fluit* 'flute'

A New account of the CRE (1)

- **Lieber on conversion:**

N/A > V and V > N conversion in English and German is "just one form of coinage of novel lexical items"; and thus "conversion verbs [...] should behave no differently from simplex coinages." (2004:94)

A New account of the CRE (2)

- A dual-mechanism model based on James Blevins's "abstractive" word-and-paradigm morphology:
 - dual-mechanism “**rules**” > abstracted “schematic paradigms”
 - dual-mechanism “**analogy**” > extension of inflectional patterns directly from lexically stored paradigms, in the absence of any schematic paradigm

Word-and-paradigm morphology

- “The key premise of any WP model is just that some set of forms smaller than a whole paradigm will suffice to identify the class of a lexeme.”
- Wherever “no set of leading forms smaller than a whole paradigm is sufficient to identify the class [...]. The forms of each paradigm must [...] be listed in full, [...]” (Blevins 2004:58)

Blevins' s schematic paradigms

- Example for English regular verbal inflection:

$R([\lambda, \text{PRES}]) = (X = Y[-\text{voice}])$
$R([\lambda, \text{PRES}, \text{INDIC}, \text{3rd SG}]) = Xs$
$R([\lambda, \text{PRES PARTIC}]) = Xing$
$R([\lambda, \text{PAST}]) = Xt$
$R([\lambda, \text{PAST PARTIC}]) = Xt$

Refinements to Blevins's model (1)

- I maintain that schematic paradigms are not equivalent to "exemplary paradigms" of actual lexical items.
- Abstracted schematic paradigms must be regarded as having psychological reality in order to get dual-mechanism effects.

Schematic paradigms are rule-like in the following sense:

- Abstraction of features is all-or-nothing:
- Features of lexical items that are not included in the schematic paradigm can play no role in determining a match. (An item either matches or it does not: no gradience.)

Word-and-paradigm vs. standard dual-mechanism models

- Rules and analogy are not nearly as different as Pinker and others have argued:
 - 1. All inflection is "analogical" in the sense that it involves paradigmatic relations among full wordforms rather than rules for combining stems with affixes (cf. Becker 1990).
 - 2. A regular inflectional pattern is not necessarily a "class default".
 - 3. Regular inflection is not necessarily concatenative.

Blevins on productivity

- "[...] productivity may be regarded as a graded phenomenon. The inflection of a **new** item can be modeled as a process of matching a basic form of the item against the existing patterns in the language to find the closest match. If the present stem of an item rhymes with the present stem of an ablaut series, the remaining members of that series provide a model for the inflection of the **new** item. (Blevins 2003:757-758, emphasis added)

Alternate views of irregular inflectional classes (1)

- Blevins echos Wurzel: “The morphological effect of rhymes is in principle nothing but an extreme case of keying the morphological properties of words, that is, their inflectional class, to their phonological properties.” (1989 [1984]:132)

Alternate views of irregular inflectional classes (2)

- ...but compare Bybee and Moder:
"Membership in morphological classes is not a matter of strict presence or absence of features but rather of similarity to a prototype, which may be defined on a number of features. [...] we can predict that a particular verb will join the string/strung class on the basis of the number of features it shares with the prototype, and the ranking of these features." (1983:263)

Refinements to Blevins's model (2)

- I contend that productivity is not entirely "a graded phenomenon".
- Specifically, there is a fundamental difference between the productivity of regular and irregular inflectional patterns.

Evidence for 2 types of productivity:

- 1. The absence of "hypersimilarity" effects in regulars (Pinker and Prince 1988:114)
- 2. The preference for regular inflection in items perceived as new (a re-interpretation of the experimental evidence reported in Kim et al. 1991).

The productivity of regulars

- **Regular** inflectional patterns are represented in abstracted inflectional paradigms and are freely available for application to any new matching item.

The productivity of irregulars (1)

- Speakers exploit their knowledge of irregular inflectional patterns in the lexicon primarily to facilitate the learning and retention of existing irregular items.

The productivity of irregulars (2)

- Analogical extension of irregular patterns to new items can occur either:
 - 1. By accident: when speakers think they are dealing with an uncommon existing word and “guess wrong” about its inflection based on available evidence.
 - 2. On purpose: when speakers deliberately produce forms that they know to be “wrong” in order to achieve some kind of effect.

Deliberate analogical extensions, 1: *wing*

- "I wung it tonight. Wung is the new past tense form of winged. So my students have no book to work with and have no idea where the lesson is going [...] So I went into class armed with one sheet and no dignity. I wung it." (http://nonvocabulary.blogspot.com/2005_04_01_nonvocabulary_archive.html)

Deliberate analogical extensions, 2: *lipsync*

“She totally just lipsync that.”

“Lipsync?”

“Lipsync.”

“Explain that to me.”

“Today you lipsync, yesterday you
lipsync, and prior to that you done have
lipsync.” ([http://www.dooce.com/archives/nubbin/
09_19_2005.html](http://www.dooce.com/archives/nubbin/09_19_2005.html))

Deliberate analogical extensions, 3: Dutch *fuiven*

- 'have a party': < *fuif* 'party' (1st attested around 1850 in student slang, etymology uncertain but may come from underworld cant)
- "*Fuiven-foof-gefoven* is zeker van oorsprong een opzettelijke, schertsende formatie, maar heeft opgang gemaakt [...]" (Haeringen 1940:251)

Deliberate analogical extensions, 4: Ger. *blinken*

"nun ja... sie hat geblunken (hä, is das richtig, "geblunken!? :rolleyes:)."

(<http://www.k-foren.de/printthread.php?t=38867&page=806&pp=40>)

Diachronic predictions (1)

- Conversion words will generally begin life as regulars, e.g. past and partic. forms of *string* in OED:
 - ***y-strenged*** - 1400; ***strynged*** - 1530, 1548; ***stringed*** - 1670, 1805, 1860
 - ***strong*** - 1591; ***strung*** - 1591, 1599, 1605, 1612, 1613, 1632, 1663, 1697, 1699, 1700, 1716, 1761, 1783, 1786, 1788, 1823, 1832, 1834, 1838, 1845, 1848, 1856, 1860, 1862, 1863, 1866, 1871, 1874, 1875, 1877, 1890, 1893, 1894, 1896, 1898, 1901, 1906, 1907, 1908, 1949, 1955, 1968, 1978

Diachronic predictions (2)

- Established conversion words will often remain regular regardless of phonological shape, due to:
 - 1) inertia: cf. persistent regularity (since OE) of non-derived *earn*, *till*, *strut*, *reap*, *shred*, *wean*, *smear*, *wink*, etc.
 - 2) re-coinage and perception as new coinage, e.g. *spit* ‘skewer’

Diachronic predictions (3)

- Original conversion words that lose their transparent connection to their base will become unrestricted candidates for irregularization.

Examples of prediction (3): German

- ***weisen*** 'show' (orig. 'make wise') < *weise* 'wise'
- ***dingen*** 'negotiate, hire' (orig. 'hold the Gmc. judicial assembly') < *Ding* 'thing' (orig. 'Gmc. judicial assembly')
- ***schinden*** 'to mistreat' < a lost noun cognate w/ Eng. *skin*
- (some dialects): ***weihen*** 'to consecrate, ordain, make holy' < lost adj. OHG *wîh* 'holy'

Examples of prediction (3): Yiddish

- **vayzn** (= G. *weisen*, adj. lost in Yiddish)
- **dingen** (= G. *dingen*, noun lost in Yiddish)
- **shenken** 'give' < lost adj. Gmc. **skanka-* 'tilted'
- **meldn** 'declare, report' < lost noun MHG *melde* 'betrayal, rumor, message'

Examples of prediction (3): Dutch

- **wijzen** (= G. *weisen*); **dingen** (= G. *dingen*)
- **schenken** (= Yid. *shenken*)
- (some dialects): **erven** 'inherit' < *erf* 'piece of real estate (house + yard)' (orig. 'inheritance')

Diachronic predictions (4)

- Regularization out of robust irregular classes will often be associated with speakers analyzing an old word as a new coinage:
 - **reihen** 'to thread, string beads': "[...] im Nhd. setzt sich schwache Flexion durch, vielleicht weil das Verb als denominative Ableitung empfunden wird" (Pfeifer 1993)
 - **bleuen** 'to beat', may have been reanalyzed as derived from the unrelated adj. *blau* 'blue' (Kluge 1975)

Conclusions about the CRE (1)

- The diachronic (as well as the experimental) evidence is generally more consistent with Lieber's view of conversion words as “just one form of coinage of novel lexical items” than with formal accounts involving “morphological tree structures”.
- But: The diachronic behavior of conversion words can only be fully accounted for if we acknowledge some kind of synchronic reality for the relationship between a conversion word and its base.

Conclusions about the CRE (2)

- Differences in the way regular vs. irregular patterns are extended to new lexical items support a dual-mechanism model of inflection, with some kind of distinction between “rules” and “analogy”.
- But within a word-and-paradigm approach, the differences between “rules” and “analogy” become much smaller than in standard dual-mechanism models: Both involve **paradigmatic** structure.

Returning to Kafka's leopards

- Recall that:
 - 1) "man" does not “just accept” the leopards' invasions as inevitable
 - 2) Rather, “man” figures out that the invasions are predictable.
 - 3) On the basis of this predictability, the leopards are incorporated into the ceremony.
- (Contrast "Das Tier in der Synagoge" from the Fragmente aus Heften und losen Blättern)

Some open questions:

- 1) What would have happened if “man” had not been able to figure out how to predict the attacks?
- 2) Did the incorporation of the leopards entail any other adjustments to the ceremony?
- 3) Who is “man”? In other words, who are the “priests” in this temple?

Answers for the temple of morphology:

- 1) The leopards could have been kept out or driven off and would have been if “man” had not been able to discern the regularity in the attacks. (Remaining question: Would ignoring the leopards have been another option?)
- 2) The incorporation of the attacks must have led to at least some tweaking and adjustment, and perhaps even to substantial restructuring of the ceremony.
- 3) This temple has a "lay priesthood" of all speakers.

The case for a professional “priesthood”

- "a linguist who could not devise a better grammar than is present in a speaker's brain ought to try another trade." (Householder 1966:100, cited in Lass 1997:12fn.10)
- My response: The synchronic grammars that matter for grammatical change are the ones in speakers' brains, not the infinitely “better” one that some linguists may devise.

My response (continued):

- The investigation of diachrony is all about going beyond what speakers “know” about their grammars in order to fully explain the properties of those grammars.
- But the notion of a useful kind of synchronic analysis that goes beyond what speakers know is precisely what Paul meant when he spoke of entering: “geschichtlichen boden, wenn auch vielleicht ohne sich klar darüber zu sein.”

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