LAWS AND RULES IN INDO-EUROPEAN

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Introduction

PHILOMEN PROBERT AND ANDREAS WILLI

In a widespread joke about linguists,¹ a linguist claims to have discovered a law that all odd numbers are prime:

- -'Three is prime; five is prime; seven is prime.'
- -'But nine isn't.'
- -'Well, it's not a law, but it's a very strong tendency.'

Various things are parodied here, but one of these is that linguists like to discover laws, and like to state things as laws (or, we might add, rules). But linguists are not the only people who like laws: variants of the joke exist for many other fields. Lawyers, for example, argue from precedent that nine should be considered prime; physicists dismiss the number nine as an experimental error. The terms 'law' and 'rule' have different meanings for different people and in different contexts. In their most everyday uses, the terms refer to prescriptive ordinances—things one must (or must not) do—with laws made by governments and rules by lesser authorities. By extension² from universally binding ordinances, prototypical scientific or natural laws describe universally applicable principles. For example, although different planets have different orbits, if a line is drawn between the centre of any planet and the centre of its star, this line sweeps out equal areas in equal times (Kepler's second law of planetary motion).

Many thanks to Darya Kavitskaya for this version of the joke.

Zilsel (1942) shows that the modern use of terms such as 'natural law' essentially appeared in the seventeeth century (though there are forerunners from antiquity onwards), and was facilitated by the idea of prescriptive laws divinely imposed on nature. Thomas Huxley apparently felt that the term 'laws of Nature' still suggested divine ordinance when he called the metaphor an 'unhappy' one (1866: 636).

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It is clear—by definition—that the laws of descriptive linguistics are not prescriptive ordinances.³ Are they universal principles in the same sense as Kepler's law? The late nineteenth century saw fierce debate on this point. At the centre of the debate were sound laws,⁴ such as the law that */s/ becomes /r/ between vowels in Latin. What would make this a natural law? Perhaps it would need to be exceptionless, in which case it would appear that we do not have a natural law because e.g. *rosa* 'rose' seems to have an unchanged intervocalic /s/. But what if we can explain the exceptions as due to the interference of analogy, borrowing, or further sound changes? Furthermore, what if we take it as axiomatic that sound laws are exceptionless, so that if a sound law has apparent exceptions, either it has been incorrectly formulated or the apparent exceptions are based on incorrect etymologies or are due to analogy, borrowing, or further sound changes—even if we cannot show which of these explanations is correct?

The extent to which sound changes are exceptionless was of course itself a focus of fierce debate.⁵ But it soon came to be agreed that sound laws were in any case not comparable to the laws of the natural sciences, because they did not hold for all times and places.⁶ Kepler's law holds for any planet in any solar system (and for other systems in which one body orbits another), but it is not true at all times and places that any [s] a language may have will become [r] intervocalically.⁷ (If there were such a law, it would be difficult to see how any language could have intervocalic [s] at all.)

The nature of scientific laws and the structure of scientific explanation have themselves been the subject of considerable discussion over the last century, together with further discussion of the relationship between laws in science and laws in traditionally unruly disciplines, such as history. One point to emerge from this discussion is the need to distinguish, in all disciplines, between different kinds of laws and different levels of explanation. Kepler's second law, for example, is now known to be derivable from Newton's second law of motion combined with his principle of universal gravitation—laws that account for a wider range of phenomena without invalidating Kepler's second law as

³ Cf. Tobler (1879: 41-2).

⁴ Cf. Tobler (1879: 43).

⁵ See Schneider (1973: esp. 1–147), Morpurgo Davies (1998: 251–5).

⁶ For an influential article in this debate, see Tobler (1879: esp. 44); for recent discussion, see Amsterdamska (1987: 112–20, esp. 118–20), Morpurgo Davies (1998: 252).

⁷ Cf. Hempel and Oppenheim (1948: 153–7), on the reasons why a true sentence of the type 'Every apple in basket b at time t is red' does not qualify as a scientific law.

⁸ See e.g. Schrödinger (1929), Zilsel (1941), Hempel (1942), Hempel and Oppenheim (1948); comparison between linguistic laws in particular with laws of other disciplines in Kovács (1971); for an instructive comparison drawn from linguistics, see also Hempel and Oppenheim (1948: 141).

a lower-level generalization.9 In what follows we offer some reflections on different kinds of linguistic laws (or 'Gesetze', etc.) and rules (or 'Regeln', etc.).

1.1 Laws as observations of some sort of order

Both in linguistics and in the natural sciences, modern debates over the proper definition of terms such as 'law' and 'rule' arose once these terms were being applied, in practice, to cases in which facts were observed to occur in accordance with some sort of order. But order was observed in historical linguistic data long before terms such as 'sound law' were applied. Russell (chapter 2) opens our volume with an investigation of medieval Irish observations of what we might now call sound laws, and the relationship between these and similar observations in Priscian's Institutiones Grammaticae. It is, however, in the nineteenth century that clear distinctions start to be drawn between different kinds of regularity in historical linguistics.

1.2 Laws of language change

As we have noted, sound laws such as "*/s/ > /r/ between vowels in Latin' are limited in time and apply to specific languages or dialects. While they may be motivated by general principles of articulation, acoustics, and social interaction, they are not themselves even derivable from more general known principles—in part because we do not know enough about the initial conditions (such as irrecoverable social factors) in any given case. 10

Sometimes the term 'law', or alternatively 'principle', is, however, used in linguistics for a higher-level claim about the nature of language change, to be understood as universal across times, places, languages, and dialects. For example, the 'regularity principle' itself is a claim about the way in which sound change operates, in any (spoken) language at any time. Stated in a banal way (one that sidesteps the vexed questions of definition surrounding both 'sound change' and 'regular'), the regularity principle states that 'sound change is regular'. Kurylowicz famously posited a series of 'laws'11 of analogy, or universal characteristics of analogical change (Kurylowicz 1947). Kurylowicz takes care to point out that his generalizations do not allow one to predict when

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See Huxley (1887: 215), Hempel and Oppenheim (1948: 146-7).

On Kuryłowicz's original wording, see section 1.9.

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On the need for known initial conditions, not only known laws, before scientific prediction is possible, cf. Zilsel (1941: 567-8).

analogical change will occur, or its extent; but when analogical change does occur, its operation will be consistent with his generalizations, just as rainwater will take known paths once we know it is raining (especially Kuryłowicz 1947: 37). A similar point could be made about most other such generalizations about language change: they describe what changes are possible, and the characteristics of particular types of change when they occur. They do not predict whether particular types of change will happen at all.

Validity across times and places may also be claimed in a more moderate way. Mańczak responded to Kuryłowicz's 'laws' of analogy by positing instead a series of 'tendencies' of analogy: characteristics claimed to be present more often than not. Although Mańczak only claimed the status of tendencies for his generalizations about analogical change, we should expect to find the effects of these tendencies across times and places unlike, say, the effects of a specific sound change such as ancient Greek $[t^h]$ > modern Greek $[\theta]$.

What we know about general characteristics of language change—what types of language change occur, and how particular types of change proceed—crucially underpins comparative and internal linguistic reconstruction and our attempts to elucidate the details and pathways of documented historical changes. It is therefore essential that historical linguists remain alert for new

evidence and insights into language change.

Part II of this book, Rules of language change and linguistic methodology, concentrates on such new evidence and insights into language change, and their methodological implications. Ringe (chapter 3) demonstrates that there were significant dialect differences within Proto-West Germanic well before the West Germanic languages ceased to undergo significant common innovations; he reflects on the impact which these findings should have for our view of West Germanic as a valid clade, and on the appropriate impact which findings of this kind should have for linguistic cladistics. Stiles (chapter 4) shows that the North-West Germanic split of /u/ into the allophones [o] and [u] by a-umlaut was phonologized (gave rise to separate phonemes /o/ and /u/) in the Older Runic language even before the loss of the conditioning environment; the principle known as Polivanov's Law, that there is 'no split without a merger' (see Collinge 1985: 253-4), is contradicted. Stiles argues that speakers first became aware of the phonetic difference between [o] and [u] and then, crucially, created analogical forms in which one allophone was substituted for another—a process which has sometimes been claimed not to occur. Widening the

Winters (1997: 368, 379) claims (against the implication of Hock 1991: 214) that even once we know analogy is taking place, Kurylowicz's 'laws' are intended as tendencies only. But the passage Winters cites in support of this claim (Kurylowicz 1947: 23, the opening of his discussion of his second 'law') supports, if anything, the opposite view.

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1991: 214) that even adencies only. But the ening of his discussion discussion, Stiles proposes a new classification of ways in which new phonemes come into existence. Stuart-Smith and Cortina-Borja (chapter 5) re-evaluate the Panjabi merger of the Indo-European voiced aspirates with unaspirated stops (either voiceless or voiced, depending on the environment), with tonal developments on adjacent vowels. They find that for some British Panjabi speakers, and in some positions, the stops that continue the voiced aspirates are different, at the fine phonetic level, from those that do not. Their findings offer support for the principle of 'near merger' identified by Labov (1994: 20) and suggest that this new principle needs to be considered when a sequence of changes is reconstructed. De Melo (chapter 6) examines the development from the Latin passive system (in which some passives are synthetic) to the Romance passive system (in which all passives are periphrastic, and tense is marked more clearly than in Latin). At first sight, these developments represent a rather straightforward application of Kurylowicz's first law of analogy: in Hock's (1991: 212) reformulation, 'forms which are more "clearly" or "overtly" marked tend to be preferred in analogical change'. De Melo shows, however, that the internal complexity of developments taking place over many centuries needs to be appreciated before Kurylowicz's first law can be assigned its proper role. Furthermore, he shows that 'clear' and 'overt' marking should not be lumped together; in the development of the Romance passive, clarity and the avoidance of ambiguity are consistently more important factors than overt marking. Morpurgo Davies (chapter 7) considers the likelihood of historical connections between instances of a change */s/ > /h/ or */s/ > /Ø/ occurring at different periods and in different dialects of ancient Greek. She suggests that where the same, or similar, changes occur in closely related languages or dialects, we need to consider not only the possibility of diffusion and of independent innovation but also the possibility of 'drift', in one of the senses discussed by Trudgill et al. (2000): change occurs independently, but variant forms of the same language share structural characteristics predisposing them to the same change.

1.3 Laws as regularities, with or without exceptions

Many laws and rules of historical linguistics describe sound changes, limited to particular periods and linguistic varieties. On one conception, these are laws if they hold absolutely, or at least, if there are no unexplained exceptions. One reason for historical linguists to like sound laws is that many are indeed statable (in ways that are non-trivial, i.e. do not simply amount to lists of examples) so that there are no unexplained exceptions. For example, for all classical Greek

words with direct modern Greek descendants, if the classical word begins with h, the modern descendant has instead N.

Non-trivial generalizations that hold without unexplained exceptions are, at the very least, rather pleasing in themselves. More seriously, they are valuable because they help to constrain our reconstructions and etymologies. Famously, the suspicion that classical Greek /theós/ 'god' is cognate with Latin /deus/ 'god' is ruled out by our knowledge that classical Greek /th/ corresponds to Latin /f/ word-initially, not to Latin /d/. The discovery of a new sound law may also open up the possibility of new etymologies, and it may or may not require revisions to our reconstructions.

Part III, Segmental sound laws: new proposals and reassessments, begins with a proposal that, as formulated, has no unexplained exceptions. Elbourne (chapter 8) adduces further arguments in support of his proposed prehistoric Greek sound law */th/ > /t/ after */s, n, r, l/ (Elbourne 1998). Although he originally proposed this law while arguing that a series of voiceless aspirated stops needed to be reconstructed for Proto-Indo-European, he argues here that there is reason to posit his law, in some form, whether or not one reconstructs voiceless aspirates for Proto-Indo-European.

Elbourne's law, as stated, has no unexplained exceptions. But some regularities have been called 'laws' and 'rules' in spite of having apparent exceptions of which their authors are well aware. In some of these cases, the term 'law' or 'rule' may simply be used loosely, or used to signal a rather high degree of conformity (a regularity that holds 90% of the time, say, rather than only 60% of the time). For some linguists, the term 'law' (and especially 'sound law') simply refers to a change that can be observed in a series of different examples.

There are, however, two stronger senses in which a partial regularity—one with exceptions—may nevertheless be conceived as a 'law' or 'rule' or (particularly for the second sense we shall discuss) a 'principle'.

1.4 Laws as regularities that ought to hold absolutely

In the first of these senses, the terms 'law' and 'rule' are used because the nature of a linguistic change is such that the author views it as one that *ought* to be exceptionless. For example, a particular linguistic change is entirely phonologically motivated, and on this basis it is called a 'law' with the expectation that the apparent exceptions will, sooner or later, turn out to be based on incorrect etymologies, or to be due to analogy or borrowing, or to be rule-governed themselves, just as the nineteenth century saw Verner's discovery that apparent exceptions to Grimm's Law had their own regularities.

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ceause the nature that *ought* to be entirely phonoloexpectation that used on incorrect be rule-governed ry that apparent Part III continues with two sound laws considered in this spirit. Although Proto-Indo-European word-initial */i/ has four apparent outcomes in Armenian, Meillet (1903b: 29) proposed that the regular development—what we might call the 'sound law'—was Proto-Indo-European *#/i/ > Armenian #/dž/. Kölligan (chapter 9) finds further evidence in favour of Meillet's view, showing that the apparent examples of other outcomes are based on less convincing correspondences or incur the suspicion of being due to analogical remodelling or the interference of further sound changes. Conversely, Zair (chapter 10) argues that a merger long assumed for Proto-Celtic (*-ou-, *-uu- > *-ou- / _V) should be abandoned, along with the search for a principled account of the British Celtic treatments of the alleged outcome *-ou-. Instead, he argues that a better account—one involving fewer unexplained irregularities—of the British Celtic treatments of Proto-Celtic *-ou- and *-uu- presupposes the separate survival of these sequences into British Celtic.

1.5 Laws as heuristic principles

A related sense in which a regularity, especially a higher-level claim about the nature of language change, might be called a 'law' or 'rule'—and this time often a 'principle'—although its validity is not absolute, is that it is regarded as a useful heuristic tool, for example in reconstruction. An example we have already mentioned is the 'regularity principle'. The expectation illustrated in the previous section, that apparent exceptions to sound changes will sooner or later turn out to be rule-governed, is only sensible if sound changes can, in fact, be expected to be regular. The regularity principle states just this. Yet we now know that (even if we look beyond the special 'sporadic' types of sound change admitted by the neogrammarians) sound changes are not all exceptionless, even when they have run their course, but may leave a small number of exceptions, known as 'residue'. Nevertheless, it is often claimed that unless we assume that sound changes are regular, we will not be able to reconstruct proto-languages at all—that the regularity principle should be retained as a heuristic tool. ¹³

This notion of a useful heuristic tool is worth examining in a bit more detail. Why should we bother to reconstruct proto-languages if we can do so only on the basis of assumptions we now know to be incorrect? If the regularity principle has any value as a heuristic tool it ought to be because we achieve

¹³ For the methodological necessity to assume that sound changes are regular, see e.g. Leskien (1876: xxviii); for an attack on this notion, cf. Schuchardt (1885: 29–30). See further Hoenigswald (1978: 24).

more accurate results by assuming the regularity of sound change than by any alternative assumptions we can actually use as a basis for reconstructing. ¹⁴ But do we indeed achieve more accurate results like this? Intuitively, it would seem that the answer here is yes: we know that sound changes may leave residue, but in the absence of methods to identify likely examples of residue, the most accurate method of reconstruction available relies on the approximation that sound change is regular. ¹⁵ More accurate methods may become available, however, if historical linguists can develop not only more accurate models but ways of incorporating them in reconstruction. ¹⁶

More generally, reconstruction and the explanation of linguistic change have to rely on the closest model of reality we can not only achieve but actually make methodological use of. Historical linguists therefore need not only to remain alert for new evidence and insights into language change, but also to consider what methods of reconstruction and explanation current knowledge about language change allows, and what principles or approximations these should be based on.

The use and discussion of heuristic principles appears at a number of points in this volume. Kölligan (chapter 9) and Zair (chapter 10) make use of the regularity principle qua heuristic principle. Stiles (chapter 4), although he argues that new phonemes may be created without a concomitant merger, in defiance of Polivanov's Law that there is 'no split without a merger', reflects (section 4.5.2) that methodologically such exceptional paths to phoneme formation should only be assumed if it is impossible to explain a new phoneme as the result of merger elsewhere in the system. In other words, Polivanov's Law should be assumed where possible; although some incorrect accounts of particular changes may result, current knowledge suggests that Polivanov's Law applies most of the time, so that we achieve more accurate results by assuming the law's validity where the data allow this possibility. Morpurgo Davies makes just this use of Polivanov's Law as a heuristic principle in arguing that Mycenaean Greek, which reflects a change of intervocalic *[s] to [h] but also has examples of analogically restored intervocalic [s], did not restore intervocalic [s] by analogy until [s] and [h] had ceased to be in complementary distribution (p. 115).

¹⁴ An analogy might be the way in which the distribution of certain types of random variable is modelled in statistics by a mathematical formula which approximates the real distribution rather than replicating it exactly, but is amenable to mathematical manipulation so that the probability of a particular result can be calculated.

¹⁵ Compare Hock (1991: 660), Clackson (2007: 32–3).

In practice, the comparative method has long been supplemented by a suspicious attitude to correspondence sets comprising few correspondences, and towards reconstructions based on such correspondence sets (for example, the Proto-Indo-European 'pure velar' series); this suspicious attitude already constitutes a rudimentary way of flagging possible examples of residue.

1.6 Origins, development, and systemic consequences

When diachronic changes are formulated as laws or rules, they typically take a form such as 'A becomes B under conditions C, for linguistic variety D, during time period E'. However, this way of stating a diachronic change does not explain how and why it began, or identify stages through which it passed. Furthermore, careful attention to chronological layers in the analysis of primary material may either weaken or strengthen the evidence for a rule. In Part IV, Origins and evolutions, Probert (chapter 11) considers the factors triggering the Greek 'law of limitation', the Greek innovation restricting the distance from the end of the word where the accent can fall; she argues that reanalysis of forms whose prehistoric accentuation already 'conformed' to the (not yet existing) law played a crucial role. Barber (chapter 12) examines the distribution of Lindeman's Law alternants such as dyaús/diyaús 'heaven' in the Rgveda, arguing that the disyllabic forms are strongly associated with formulaic contexts where they are likely to represent an archaic survival. He concludes that the restriction of such alternants to potentially monosyllabic words cannot be used to draw substantial conclusions about the phonology of Vedic or Proto-Indo-European: this restriction may well be a by-product of the circumstances under which such archaic forms survived. Sen (chapter 13) shows how attention to chronology can clarify the conditions for Latin syncope; he argues that six different stages of Latin syncope, with their own synchronic motivations and phonetic environments, can be discerned up to classical Latin.

As well as being chronologically layered in their development, laws and rules may also have systemic consequences whose relationship to the original law or rule is not necessarily straightforward. An understanding of these systemic consequences may be necessary before the evidence for the original law or rule can be clearly seen—and yet systemic consequences are, of course, difficult to work out if the conditions for the original law or rule are less than fully understood. Part V, *Systemic consequences*, is devoted to laws and their systemic consequences, and the impact of the interplay between the two on our understanding.

Tucker (chapter 14) examines the effects of Brugmann's Law (apophonic *o > Indo-Iranian \bar{a} in medial open syllables, with further conditions subject to debate) on several categories of Indo-Iranian thematic nouns ultimately related to Indo-European formations such as * $bh\acute{o}ro$ - or * $-bhor\acute{o}$ -, showing how both short and long root vocalism spread analogically at particular periods and in particular categories, and the contrast between -a- and $-\bar{a}$ - could be refunctionalized (e.g. to distinguish between *nomina agentis* and *nomina actionis*). Tucker's study also highlights that, when these systemic consequences are taken into account, some categories still provide irreducible evidence for

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Kuryłowicz's (1927) restriction of Brugmann's Law to syllables not closed by an inherited laryngeal. Willi (chapter 15) argues that Kiparsky's rule for Greek, *-Vti#> *-Vit, caused (a) the third person singular of nasal-infix presents to * $h_{\rm I}$ -final roots to fall together with the third person singular of thematic presents, and (b), in some dialects, the third person singular of *-eielo- and *-āielo- presents to fall together with the third person singular of athematic presents in - $\eta\mu$ 1 and -ā μ 1. These mergers then triggered (a) the thematization of nasal-infix presents to * $h_{\rm I}$ -final roots, and (b), in the relevant dialects, the athematic inflection of *-eielo- and *-āielo- presents. Conversely, the rule's ability to explain these awkward phenomena provides support for Kiparsky's rule itself, in a form close, but not identical, to its original formulation.

1.7 Synchronic laws and rules

The most obvious laws and rules of historical linguistics are diachronic ones, yet historical and comparative linguistics has to be based on adequate synchronic analyses of attested linguistic varieties. This point becomes especially clear where the necessary synchronic analyses are difficult to achieve, as often in syntax, pragmatics, or sociolinguistics. For example, attempts to reconstruct the syntax of Indo-European come up against (among other things) the limits of our syntactic understanding of early attested Indo-European languages; attempts to describe the early syntactic development of the Romance languages are plagued by the deficiencies of our syntactic understanding of Latin.

But there may be another reason why synchronic analysis is crucial for diachronic work. For several models of language change (e.g. reanalysis and extension, parameter resetting, or constraint reranking), the emergence of a new synchronic regularity is not merely a consequence of linguistic change. In an important sense, the emergence of the new synchronic state *is* the crucial linguistic change, since surface change only occurs once speakers have already started to operate with the new synchronic grammar. If some of these models capture any reality, even some of the time, historical linguists simply cannot ignore the synchronic laws and rules that come and go as languages change.

Moreover, not all synchronic rules come and go. On the synchronic as much as on the diachronic plane, a distinction needs to be made between generalizations specific to a particular linguistic variety at a particular period, and higher-level claims about the nature of synchronic linguistic systems—in other words, synchronic linguistic universals. An example of the latter is the law first posited by Kruszewski (1885: 263), that sound systems have a certain 'harmony' (or symmetry or pattern congruity): thus, if a language has a voiceless and a voiced

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chronic as much a generalizations and higher-level n other words, law first posited n 'harmony' (or less and a voiced stop series, the same places of articulation are likely to appear in both series. Many alleged linguistic universals are in fact tendencies rather than laws with absolute validity, but even so they are tendencies whose validity is not limited to a particular linguistic variety at a particular time: in order for any sort of universality to be a sensible claim, the alleged universal must at least be a fairly widespread synchronic phenomenon. Synchronic universals and tendencies are important for historical linguistics in so far as they (or rather their causes, whether or not these are known to us) may constrain language change. ¹⁷

Part VI, Synchronic laws and rules in syntax and sociolinguistics, is devoted to synchronic laws of interest to historical linguists. Langslow (chapter 16) tests proposed rules for the placement of attributive adjectives in Latin against an analysis of the placement of attributive urbanus in a corpus of Latin prose works from Varro to Suetonius. Dickey (chapter 17) examines polite request formulae in Cicero's letters in the light of several different theories of linguistic politeness, three of these being theories for which some universality has been claimed, and the fourth having been developed specifically for Latin. She finds that, when combined with a careful examination of the Latin evidence, different theories help us to arrive at a better understanding of different request formulae. We do not yet have the laws and rules of Latin politeness (let alone language-universal politeness rules), but it seems that to understand Latin politeness fully we will need to identify and reconcile what is right about several different current theories.

1.8 Prescriptive rules

We have said that the laws of descriptive linguistics are not prescriptive ordinances, but this is not to deny that there are prescriptive rules for linguists to follow. One of these, hinted at by Collinge in his *The laws of Indo-European* (1985: 1), is that different laws should not be given the same name. In this connection we must confess that we have given this book a somewhat similar title to Collinge's. And yet there are differences; for example, the definite article of Collinge's title is lacking here. This book will not replace Collinge's masterly guide to the main named laws of Indo-European; it is exploratory rather than definitive. Yet Collinge's guide provides a context that makes it feasible to treat Indo-European laws and rules as a field in which much is clear, but specific problems can be taken up and new avenues explored. We hope that the near-minimal-pair titles will be seen as complementary.

For informative debate on the relationship between language change and linguistic universals, both synchronic and diachronic, see the papers in Good (2008).

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1.9 Laws, rules, principles, and tendencies: a case of partial terminological overlap

We have spoken so far of laws and rules, and sometimes of principles and tendencies, without attempting to draw clear boundaries between the meanings of these terms. In practice, the terms 'law' and 'rule' are often used interchangeably, in historical linguistics as in many other fields. But some distinctions may be observed.

The term 'rule' is often (but not always) used for something with an input and an output: either a historical change (e.g. ancient Greek $[t^h]$ became modern Greek $[\theta]$) or the sort of replacement operation that models a synchronic alternation in generative grammar and much traditional grammar (e.g. voiced stops become voiceless word-finally in standard German).

The term 'law' may also be used for a historical change with an input and an output. So the historical change of ancient Greek $[t^h]$ to modern Greek $[\theta]$ may be described either as a sound law or as a sound rule. The term 'law' is not, however, normally used for a replacement operation in a synchronic grammatical description. It is clear, for example, in Paul's (1909: 68) discussion of synchronic and diachronic operations that the term *Lautgesetz* is appropriate for the early Greek change, in historical terms, of a dental stop to /s/ before another dental stop. But when one says, in synchronic terms, that a Greek dental stop changes to /s/ before another dental stop (so that the root of e.g. $\pi\epsilon \ell\theta$ - ω 'I persuade' turns its final /t^h/ into /s/ in the aorist passive infinitive $\pi\epsilon\iota\sigma$ - $\theta\hat{\eta}\nu\alpha\iota$ 'to be persuaded'), this replacement operation is a *Regel*.

The term 'law' may, however, be used for a synchronic regularity conceived as a constraint rather than an operation with input and output. Thus, Wackernagel's Law describes the regular placement, in many languages, of unstressed elements in second position in the clause, without any implication (in its original formulation) that these elements move to second position from some other place.

Higher-level claims about language change, meant to be valid across time and across languages, may be called laws (as in Kuryłowicz's laws of analogy), or principles (as in the regularity principle); they are not normally called rules.

In a usage that cuts across these distinctions, however, some authors oppose the term 'law', for regularities that hold absolutely, to 'rule' or especially 'tendency', for regularities that hold less than absolutely. ¹⁹ Hence Kuryłowicz's

¹⁸ Cf. Tobler (1879: 45). On other disciplines, cf. Huxley (1887: 213-14).

¹⁹ Cf. the first sentence of chapter 16 (Langslow, p. 279): My purpose here is to present a case study against the background of attempts to explain with reference to rules (or regularities, or strong tendencies), if not laws, the placement of the attributive adjectival modifier of the noun in Latin. Notice that (at least when stated in a theory-neutral way) the 'rules' of adjective placement

generalizations about analogical change, claimed to be valid whenever analogical change occurs, have come to be referred to as 'laws', while Mańczak's have been dubbed 'tendencies'.

Some of the distinctions just drawn between 'laws' and 'rules' make 'laws' the grander cousins of rules. If a regularity is valid across languages it is likely to merit the term 'law' (or 'principle'); if it is exceptionless, then even if it is specific to a particular period and linguistic variety it may also merit the term 'law'. More generally, the term 'rule' has slightly less grand connotations and is often used of a regularity whose significance is relatively local, or one named by an unpretentious person.²⁰ It is no accident that the joke we began with makes use of the grander term 'law'.

However, usage varies. We have mentioned Kuryłowicz's 'laws' of analogy and Mańczak's 'tendencies', but in Kuryłowicz's own presentation of his generalizations the term 'loi' is less prominent than 'formule'. Mańczak in 1958 calls his own generalizations 'tendances générales', 22 but in 1978 (e.g. p. 54) he prominently calls them 'lois', although it is quite clear that he still means these to be statements about what happens more often than not. The rules of usage we have observed are not laws, but they are definite tendencies.

do not obviously have an input and an output: the sense of the term 'rules' as 'regularities with less absolute validity than laws' here trumps the idea that 'rules' have an input and an output. For similar usage in other fields, cf. Tobler (1879: 37–8, 40).

For rules in the natural sciences as regularities whose importance is (in various ways) lower than that of laws, cf. Tobler (1879: 37–8, 40). In one such conception, laws are the inner causes of regularities, while rules are only the outer observable regularities themselves; Kovács (1971: 367–8, 378) advocates essentially the same conception for linguistics.

367–8, 378) advocates essentially the same conception for linguistics.

'Loi' at Kuryłowicz (1947: 20, 21, 25, 27); cf. Winters (1997: 368). Winters appears to consider this point to support her contention that Kuryłowicz did not mean his 'laws' as generalizations that hold absolutely. Given the usages we have discussed, Kuryłowicz's choice of terminology is certainly not irrelevant, but his views cannot simply be deduced either from his use of the term 'loi' or from his overall preference for 'formule'. Although Kuryłowicz's style is never easy, the reading of Hock (1991: 210–29) and others, that Kuryłowicz's laws are meant to hold whenever analogy takes place, is also supported by the use Kuryłowicz made of his laws in subsequent work, such as Kuryłowicz (1952a), Cf. Mańczak (1958: 417).

See especially the discussion at Mańczak (1958: 417), in which Kuryłowicz's view is characterized as one in which there are 'lois absolues' in analogy, and is opposed to Mańczak's view that there are only 'tendances'; 'tendances' are then rephrased as 'règles' that hold for the larger part of the evidence.

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