

CYPRIOI GREEK REVISITED

BRIAN NEWTON

1. The Abstractness Issue

In the decade or so since *Cypriot Greek* (Newton 1972) was published it would probably be fair to claim that one trend has dominated much of the work in the various fields of linguistic analysis – the trend towards a higher degree of concreteness in the description of data. One finds it in syntax (where surface structure interpretation takes on much of the work previously assigned to the classical transformations), in semantics (where the highly abstract underlying structures of the generative semanticists have been increasingly called into question) and in phonology (where, again, the general movement has been towards the ‘surface’). In the following comments I wish to reconsider certain phonological phenomena characteristic of Cypriot Greek in the light of this general trend. In particular I shall address the question of ‘learnability’. There are two subquestions involved:

(1) To what extent is the speaker of Cypriot Greek in a position to construct a phonological theory of his own dialect without drawing on data from other forms of the language?

(2) In what ways will his theory need to be revised in the light of supplementary data from standard Demotic (data which of course is nowadays invariably accessible to all speakers of Modern Greek)?

Intimately related to the notion of learnability is that of constraints on rules and representations; without the observance of general conditions on linguistic rules there can be no limit on their power, so that while such unconstrained systems will produce everything found to date in human languages they will also produce an enormous range of phenomena which do not in fact occur and will thus fail to correctly characterize the competence which speakers bring to bear on the acquisition of the language of the community into which they are born. Various specific constraints have been proposed (a convenient summary by an adherent of the ‘Natural Generative Phonology’ school is to be found in Hooper 1976). The ‘Naturalness Condition’, for example, an early entry to the field (Postal 1968) insists that underlying forms of morphemes should be specified in features that have intrinsic phonetic content. Kiparsky’s ‘Alternation Condition’ outlaws the use of phonological features as ‘diacritics’ (e.g. to distinguish classes of words in which particular rules apply or fail to apply). This principle would presumably disallow various proposals made by Modern Greek scholars to treat the resistance of numerous items of

katharevusa provenance to otherwise normal phonological processes as a phonological rather than as a stylistic matter. For instance, verbs such as δημοσιεύω 'publish' undergo the general rule of Voice Assimilation converting /v/ to [f] in their perfective forms (/ðimosiev + sa/ → [ðimosiefsa] 'I published') but not that of Manner Dissimilation which is otherwise normal in Demotic (/ðulev + sa/ → [ðúlepsa] 'I worked'). The Alternation Condition is presumably violated in descriptions which treat the [v] of δημοσιεύω as underlyingly distinct phonologically from that of δουλεύω (e.g. Malikouti 1970), rather than by marking lexical items as possessing plus or minus values of a feature such as KATHAREVUSA. The 'True Generalization Condition' represents a still further stage in the flight from abstraction (Hooper 1976:13):

It would require that all rules express transparent surface generalizations that are true for all surface forms and that, furthermore, express the relation between surface forms in the most direct manner possible.

Perhaps the most popular stamping-ground in the abstractness controversy has centred around the concept of rule ordering. The principle that phonological rules are applied in a consistent language-specific order, a basic tenet of generative phonology, has been questioned on various grounds; one has simply been that appeal to ordering allows the setting up of highly abstract forms. It is indeed true that all the constraints mentioned interlock in intricate ways. I shall now proceed to look at various phenomena of Cypriot Greek from the point of view of abstractness and learnability, but will for purposes of exposition organize the discussion round the matter of ordered rules.

2. Feeding Order

The most consistently made distinction between types of rule order in both phonology and syntax is that which sets intrinsically ordered pairs apart from those which are extrinsically ordered. An intrinsic ordering occurs when the correct order of application of two rules A and B is automatically determined by the description of the rules alone; rule A creates an input for rule B, so that for any particular item to which both rules apply B's structural description is not satisfied until A has operated. Let us consider a typical case from Cypriot Greek.

- (1) 'it withered'
- | | |
|--------------------|------------------------|
| e + maran + θ + in | |
| e + marán + θ + in | Stress Assignment |
| emaráθθin | Nasal Assimilation |
| emaráttin | Dental Occlusivization |

It is clear from the above that the rule of Nasal Assimilation, which, inter alia, effects the complete assimilation of nasals to following fricatives, creates an input to the rule referred to here as Dental Occlusivization, which has the rather specific effect of converting geminate /θθ/ within words to [tt] (phonetically a long aspirated voiceless dental stop). There is simply no way in which the occlusivization process can apply before the nasal has been assimilated; thus we may simply allow the rules to apply whenever their input conditions occur. What this entails is that both rules

apply without exception at the level of surface structures. In truly dialectal forms there can be no cases of [nθ] or of [θθ] within words. It is thus no wonder that the anti-abstractness school of linguists has found it easy to live with intrinsic ordering.

While feeding orderings in general promote concreteness it may be noted that they can guarantee learnability only if accompanied by strict observance of something akin to the True Generalization Condition. In the case of [emarátin] we can point to the evidence of alternation between surface [n] + [θ] sequences and [tt] by considering, for instance, the present stem [maran] as in [maraníko] 'I wither' and the many perfective passive forms with [θ] such as [evréθin] 'was found'. There are however cases in which surface [tt] occurs and in which no evidence of inflectional alternation can support the /nθ/ analysis. Two common such items for which a /nθ/ source was nonetheless postulated in *Cypriot Greek* were [petterós] 'father-in-law' and [attós] 'blossom'. The basis for this analysis can only be that in nondialectal forms these words show /nθ/ (c.f. Demotic [anθopolío] 'flower shop'). Clearly without such external sources of information the dialect speaker can have no way of knowing whether his [tt] in such nonalternating cases reflects a /nθ/ or a /tt/; no one would presumably wish to argue that surface [tt] should be uniformly derived from /nθ/ unless he were willing to set up an abstract /piθθa/ 'pie' for what in all dialects appears as [pítta] or [píta].

At the same time it might be argued that most if not all speakers of Cypriot Greek are familiar with Demotic items such as ανθωπωλείο and in most cases with Katharevusa cognates such as πενθερός, that they are aware of the phonological correspondences linking the various stylistic levels, and that therefore this knowledge constitutes a real part of their linguistic competence. The problem of accounting for phonological correspondences between vernacular and 'learned' cognates is not of course confined to Greek. The Romance languages display an exactly parallel situation; for instance French *lait* [le] 'milk' is the reflex of Latin *lacte* arising from the interplay of various quite regular sound changes operating over two millennia, while the learned item *Voie Lactée* 'Milky Way' is based directly on the Latin root. It is often felt that if such relations are to be handled in the synchronic phonology at all they should be assigned a special status. The term 'via-rule' has been proposed (Vennemann 1971). There is however one important feature which appears to distinguish Modern Greek from the Romance languages: in Modern Greek the rules linking vernacular to learned forms are usually identical to those required in any case to account for intra-vernacular alternation: the [nθ : tt] relation not only represents a regular correspondence between Katharevusa and Cypriot but underlies important areas of inflectional morphology. Or consider the rule of Manner Dissimilation. We may wish to claim that the link between 'learned' [elikóptero] 'helicopter' and vernacular [fteró] 'feather' is exactly that which relates [ðulévo] 'I work' to [ðúlepsa] 'I worked', i.e. a rule legislating in vernacular Greek against contiguous obstruents of like manner of articulation. In summary, one might surmise that a realistic phonology of Cypriot Greek or of any other dialect displaying regular phonological relations to a more prestigious, standard, or learned norm would treat as most basic those rules which directly reflect dialectal alternations in inflectional and derivational morphology; secondly it would treat as less basic such correspondences

linking standard to dialectal forms as are also incorporated into dialectal morphological alternation ('mixed rules'); thirdly it would recognize as its least basic category rules which had the sole function of linking stylistic levels. For Greek it is not clear if any rules of this type can be found for Demotic vis-à-vis Katharevusa, although a possible candidate might be Final Nasal Deletion. For instance Katharevusa άνθρωπον 'man' (accusative) is in standard Demotic the same except for the final nasal. For Demotic on the one hand versus the regional dialects on the other examples are probably easier to find, and involve cases where *either* Demotic *or* the dialect has innovated without inducing alternation. Where it is Demotic which is the innovating partner it may be linked to Katharevusa and to a regional dialect by the same via-rule. A case in point is the Nasal Deletion rule just referred to where both Katharevusa and Cypriot retain the final nasal of άνθρωπον. Or again, standard Demotic as distinct from Cypriot has reduced geminate consonants, so that we can set up a via-rule degeminating Cypriot long consonants to yield standard forms. We may note at this point that what is a via-rule for one dialect may be a basic phonological rule for another. For instance, to use the same example, in Demotic degemination is a basic rule accounting for the fact that geminate consonants straddling morpheme boundaries are simplified. Thus for εύφορος 'fertile', phonologically /év + foros/, we get [éforos], and for τον νόμο 'the law' (accusative), phonologically /ton + nómo/, [tonómo]. From the point of view of Cypriot Greek however what we have is a via-rule saying that, for instance, geminates in [éfforos], [tonnómon] correspond to simple consonants ([éforo], [tonómo]) in Demotic and Katharevusa.

What was said about *pairs* of rules intrinsically ordered applies equally well to *sequences* of rules so ordered. Generally speaking, as long as the initial input can be justified dialect-internally on the basis of alternations, we shall not obtain forms which depart so radically from observable surface representations as to raise questions of learnability. An excellent example is provided in Cypriot Greek in the treatment of plurals such as /spíti + a/ 'houses' (c.f. for the /i/ [spítin] 'house'). This occurs on the surface as [spíθk'a] or [spík'a]; to obtain the latter variant four rules are necessary:

- (1) Glide Formation converts /i/ to [y] before vowels.
- (2) Consonantalization converts [y] to [x'] or [ɣ'] after obstruents depending on their voice state.
- (3) Manner Dissimilation ensures that nonsibilant dyadic obstruent clusters consist of fricative + stop.
- (4) Theta Deletion converts (in various subdialects) [θk'] to [k']. The derivation in question thus runs as follows:

- | | |
|------------|----------------------|
| (2) spítia | |
| spítya | Glide Formation |
| spítx'a | Consonantalization |
| spíθk'a | Manner Dissimilation |
| spík'a | Theta Deletion |

That no extrinsic ordering constraints are involved may be shown by going down the derivation and noting that each output meets the structural description of only one of the four rules:

(3)		GF	C	MD	TD
	spítia	1	0	0	0
	spítya	0	1	0	0
	spítx'a	0	0	1	0
	spíθk'a	0	0	0	1
	spík'a	0	0	0	0

Thus adherents of the No-ordering Condition should have no qualms on the score of this and similar cases; furthermore the relation between [ti] and [k'] represents a true surface alternation. From the point of view of general linguistic theory each of the required rules 'captures a generalization'; each is 'needed anyway' in the grammar. Furthermore each of the intermediate outputs represents a possible pronunciation actually found in slower or standardizing renditions. One might perhaps wonder whether however, if (per impossibile) a speaker had no access to other dialects, he would actually internalize a serial application of four distinct rules rather than simply a 'one-shot' rule /ti/→[k'] in the environment before vowel. Other than point to the vast amount of data from historical linguistics and language acquisition usually claimed to prove that speakers seek to formulate maximally general rules, it is difficult to see how one can devise an empirical test to distinguish the serial from the 'one-shot' account. More serious is the fact that one of the postulated rules, that of Glide Formation, does not appear to represent a true generalization; although it relates surface forms it is not without exceptions once we abandon the No-ordering Condition. In order to see this we must turn to cases in which the actual order is the converse of 'feeding'. That is, the rule which creates a potential input for the other is in fact prevented from doing so by being ordered in conventional generative phonology *after* it.

3. Counterfeeding Order

Among the dozen or so relatively major phonological rules of Cypriot Greek discussed in my earlier work only two pairs appear to be linked in counterfeeding order. Let us first consider the rule of Glide Formation, one which operates generally in Modern Greek, in relation to the characteristically Cypriot (or better, South Eastern) rule of Intervocalic Voiced Fricative Deletion, which has the effect of deleting /v, ð, γ/ between vowels.

The motivation for postulating the deletion rule lies in the occurrence of alternations such as [lái] 'oil': [láθk'a] (plural), [karáin] 'boat'; [karáfk'a] (plural). The problem with this is that because Glide Formation must apply before Voiced Fricative Deletion, the former rule cannot be claimed to express a true generalization about surface alternations even if we reject by fiat as 'learned' such counterexamples as [musía] 'museums'. To show this let us compare the derivations of [ía] 'I saw' and [nišá] 'islands':

(4)	íða	nisía	
		nisyá	Glide Formation
	ía		Voiced Fricative Deletion
		nišá	(other rules)

As is clear from this example the rule of Voiced Fricative Deletion, which creates potential inputs for Glide Formation, must in fact follow it to ensure that secondary /i/ + vowel sequences resulting from fricative deletion are unaffected by the glide rule. The question therefore arises as to whether Glide Formation is in fact, as a purely phonological rule, learnable. Or should we rather retain it but impose morphological conditions on its application? For surely it would be unrealistic to suppose that speakers learn the vast number of [i]:[y] alternations in normal paradigms on an item by item basis. It may be noted that here the problem is not one of abstract underlying forms per se; in fact speakers may be shown to have clear evidence for the underlying forms in so far as surface alternation of a direct kind is easy to find. Thus, for [ía] we have the imperative and perfective nonpast forms [ðés] and [ðó]. Or compare the similar case of [ð]-initial verb stems such as [ðóko] 'give' (perfective nonpast) which when augmented lose their voiced fricative ([éoka] 'I gave'). The problem lies purely and simply in the fact that Glide Formation is an 'opaque' rule (in the sense of Kiparsky 1971). That is, there are surface representations which violate the rule which says that /i/ converts to [y] in the environment before vowel.

A further problem arises when we argue from cases such as [ía], for which at any rate surface manifestations of the putative underlying /ð/ are not lacking to other forms such as [efimería] 'newspaper' for which there is no dialect-internal evidence for a missing voiced fricative other than the hiatus. But this of course is to commit the logical fallacy (so very popular in the linguistic literature) of 'affirming the consequent': if a voiced fricative is deleted then hiatus results; there is hiatus, so a voiced fricative has been deleted. And then the door is left wide open for arbitrary degrees of abstractness. Why not claim, for example, that [musía] is the surface representation of /musíða/ or /musíva/, /musíya/? Presumably because in no variety of Greek is a voiced fricative manifested – but this is again to appeal to inter-dialectal relations in the analysis of intra-dialectal alternation.

The other instance of counterfeeding involves the subdialectal conversion of initial and intervocalic /θ/ to [x]. In such a dialect 'basket' and 'he has' may be derived as follows:

(5)	kaláθin	éxi	
		éši	Palatalization
	kaláxin		Velarization

The Palatalization rule, which in Cypriot Greek converts /x/ to [š] and /k/ to [ç] before front vowels, must 'not be allowed' to apply to secondary [x] arising by Velarization (i.e. the rules are *extrinsically* ordered). As in the case of (4) there is no problem of abstractness of underlying forms, as alternation for both rules is regular on the surface; thus corresponding to [kaláxin] we have the plural [kaláθk'α], and for [x]:[š] alternation we may look at the whole paradigm of έχω (e.g. [éxo] 'I have').

Opacity is again our problem. It is not possible to define Palatalization as a general rule on surface structures. And again we are attempted to affirm the consequent. If /θ/ before front vowels surfaces as [x] why not suppose that all surface sequences of [x] before front vowel go back to /θ/ even in the absence of alternation? [xéros] 'harvest', for instance, on this basis, would derive from /θéros/; on the other hand we would presumably wish to treat [x] before back vowel as a reflex of underlying /x/, so that [xoró] 'I see' would be derived from a form with /x/ in spite of the fact that extradialectal forms are [θéros], [θoró], with [θ] in both cases.

While it is obvious that counterfeeding ordering allows both abstractness and surface exceptions to raise their ugly heads, thus posing a threat to learnability, it is not at all clear how to remedy the situation. An extreme solution would be to simply deny that rules such as Glide Formation exist and that the alternations which they apparently induce are in fact present in underlying forms. Thus [ia] is claimed underlyingly to be [ía], and [nišá], /nisyá/. Similarly the existence of Palatalization would be denied and alternations such as [éxo] : [éši] traced to underlying /x/ : /š/ contrasts. However, to consider just the latter case, the sheer extent and regularity of this alternation in verbal and nominal inflectional systems (for nouns c.f. [tíxos] 'wall', plural [tíši]) must surely force us to treat it as quite different in character from rare and (at least for Modern Greek) suppletive relations such as that linking [a] and [i] in [páo] 'I go' and [epía] 'I went'. One obvious suggestion would be to expand the structural description of rules such as Glide Formation by adding morphological information. Thus we might wish to specify that stem-final /i/ of neuter nouns is replaced by [y] before vowels (or in the plural and genitive forms). Such information, it may be added, is required anyway in other areas of the grammar. For instance, while /x/ is replaced by [š] quite regularly in both verbs and nouns, the corresponding shift from /k/ to [č] appears to be inhibited in the verbal system ([pléko] 'I knit' : [plék'i] 'he knits'). Such an approach would on the other hand allow us to state genuine generalizations and at the same time eliminate the need for abstract underlying forms without direct surface manifestations. Thus [ia] and [nišá] would be treated somewhat as follows, with the rules applying whenever their structural description is met:

(6)	iða	nisía	(neuter plural)
	ía	nisyá	Glide Formation, Voiced Fricative Deletion
		nišá	(other rules)

Because [ia] is not a neuter plural it does not undergo Glide Formation.

4. Bleeding Order

Two cases of bleeding order appear among the major rules of Cypriot Greek, both involving interaction with Glide Formation. We saw in the last section how sequences of /i/ + vowel which arise from the action of Voiced Fricative Deletion are exempt from Glide Formation, so that we get a counterfeeding situation. It is however possible for Glide Formation to actually remove potential inputs to the deletion

rule. This occurs when a postvocalic voiced fricative is followed by an /i/ which is in turn followed by a vowel and accordingly meets the structural description for Glide Formation. Let us consider the singular and plural forms of 'oil':

- (7) láðin láðia
 láðya Glide Formation
 láiin Voiced Fricative Deletion
 láθk'a (other rules)

Because Voiced Fricative Deletion affects only intervocalic segments any rule which removes one of two flanking vowels will automatically block it. The converse order would lead to an incorrect result:

- (8) láðin láðia
 láiin láia Voiced Fricative Deletion
 *láya Glide Formation

As in counterfeeding cases the description of the rules alone does not guarantee the correct order of application, so that we are again forced to appeal to extrinsic ordering constraints. At the same time, however, we do not find that in simple cases at least the True Generalization Condition is violated. Derivation (7) does not constitute a simple case in that 'other rules' act on the original /ð/ to convert it to [θ] in most varieties of Cypriot Greek, but where these extra processes are absent, as in the Paphos area, we have surface alternation between [láiin] and [láðya]. Where the singular has [i] before consonant, the plural has [y] before vowel, so that Glide Formation remains eminently learnable. Similarly where the plural has /ð/ in non-intervocalic position, the singular has zero in intervocalic position so the Voiced Fricative Deletion also meets the True Generalization Condition. This means that the naturalist's only qualms must concern the need to specify order of application. Given the input /láðia/ and the maximally general statement of our two rules we observe that the structural descriptions of both is simultaneously met. There are therefore two logically possible ways to proceed. We may apply both rules simultaneously or we may apply them in sequence. If we take the first option then both the /ð/ and the /i/ are affected by the appropriate processes, giving the incorrect output [láya]. The sequential option will yield the same output if Voiced Fricative Deletion is applied first (as in (8)) or the correct [láðya] if the order is reversed. If we insist on the No-ordering Condition there is only one solution, which is to restrict the 'bled' rule of Voiced Fricative Deletion so that it does not apply to items meeting the structural description of Glide Formation. That is, it will apply to cases of intervocalic voiced fricatives except when the vowel immediately to the right of the fricative is /i/ and is followed by still another vowel. Although this kind of rule complication is apparently acceptable to phonologists working in the natural school as the lesser of two evils, it does of course run counter to the whole thrust of linguistic enquiry, which is, if it is anything, to discover general principles. As we noted, on the surface Cypriot Greek does not allow intervocalic voiced fricatives, so that the adoption of the suggestion that we should limit the application of the Voiced Fric-

ative Deletion will force us in effect to deny an obvious generalization.

The second case of bleeding order noted for Cypriot Greek involves Glide Formation and the Velarization rule mentioned above. While the singular /kaláθin/ goes by Velarization to [kaláxin], its plural [kaláθk'a] is protected from this by the previous application of Glide Formation. However, a discussion would add nothing new to what was said regarding the first case.

5. Counterbleeding Order

The only unambiguous case of counterbleeding in *Cypriot Greek* involves the interaction of the rule of Stress Assignment on nouns and the rule which was set up to shorten purportedly long underlying vowels. Thus it was assumed (I think correctly) that nouns have intrinsic underlying stress, and that this underlying stress is shifted in accordance with a purely phonological rule (the 'three mora' rule), a far more doubtful proposition. Thus, details apart, the nominative singular, nominative plural, and genitive singular of 'name' were derived as follows:

(9)	ónoman	ónomata	ónomatU	
		onómata	onomátU	Stress Assignment
			onomátu	Shortening

The three-fold surface alternation of stress in [ónoman]:[onómata]:[onomátu] was thus 'elegantly' accounted for in a simple rule 'transfer to the vowel which is located at the third mora from the end of the word any stress occurring earlier'. Similar in basic essentials was the treatment accorded to verbs, the main difference being that in this case verbs were deemed to be underlyingly unstressed, so that the stress rule had to create stress on the third mora from the end rather than shift it to that position from an earlier one. Thus [ðuléfko] 'I work' had an underlying final long /O/ to ensure that the penultimate vowel was, at the point in the derivation where stress was assigned, the antipenultimate mora. This analysis is of course far from rare in the literature, either in the 'long vowel' version or that which prefers underlying geminate short vowels (e.g. Malikouti).

From the point of view of the Non-ordering Condition there does not appear to be a serious problem as long as we are prepared to allow rules to apply simultaneously should their structural conditions be *met* simultaneously. /ónomatU/ meets the conditions for both stress shift to /a/ and the shortening of /U/, so the most natural outcome can reasonably be claimed to be [onomátu].

The main problem with the postulation of long vowels in underlying structure is that they do not have a direct basis in surface alternation (although one could claim for them an indirect basis in that alternations such as [ónoman]:[onómata] suggest that a principle somewhat akin to the three mora rule may be at work for [ðulévete]:[ðulévo]). Thus various 'natural' principles are violated. The True Generalization Condition is blatantly violated in that there is never alternation between surface long and short vowels, and we are furthermore postulating underlying forms in which a feature [+ LONG] occurs which has no intrinsic phonetic content at least in the vowel system. Furthermore the Alternation Condition is ignored in so far as the

length feature serves purely as a diacritic, that is, it is a phonological feature whose role is to distinguish cases in which the fairly general rule of stress assignment fails to be correctly applied. Thus, if we assume that verbs are regularly stressed on the antipenultimate vowel, forms such as [ðuléfko] are exceptions and the postulation of final long /O/ does no more than mark this fact.

Clearly the setting up of underlying long vowels is a highly questionable device for those who aim to characterize the psychologically real competence of speakers. To propose in any detail at all a realistic model for stress assignment in one relatively uniform dialect of Modern Greek would in itself require a lengthy monograph, but it may simply be mentioned that two ideas favoured by the opponents of abstract phonology (though obviously not conceived by them) will have to play key roles in any such attempt. The first is that of 'morphologization'; what started out in Ancient Greek as a purely phonological rule governing stress - the 'three mora' rule - finishes up in Modern Greek, which has collapsed vocalic length contrasts, as a rule involving at least some morphological specification (e.g. the genitive nominal affix $+[u]$ induces stress shift from antipenultimate to penultimate vowel as in [onomátu]). The second is the principle of paradigmatic uniformity. The stress of the present tense of [ðuléfko], for instance, is governed by the true generalization that it is stem-final (see Warburton for discussion).

6. Summary

The main issue discussed in these comments was that of the ordering of phonological rules in relation to a particular dialect of Modern Greek and from the point of view of the ongoing debate over the acceptability in linguistic description of abstract rules and representations. We saw that certain types of rule ordering tend in their very nature to lead to the postulation of rules which cannot be directly derived from surface alternations and to underlying forms which are quite remote from the phonetic representations which they purport to explain. Extrinsic ordering specification can be avoided, as is apparent from the examples cited, by either (a) complicating the rule description or (b) simply denying that particular rules exist. Indeed a third line of approach has sometimes been attempted, which is to accept ordering but to determine general principles governing order of application; I did not discuss this possibility because as far as I can see there cannot be any such principles in phonology, for in phonology (although not necessarily in syntax) synchronic rule order is determined by historical accident. Trends may exist towards reordering in specific directions, and towards simplifications of various types, but surely it is counterintuitive to claim that, in the present state of our knowledge, specific changes are initiated in an order determined by universal principles.

To end on a pragmatic note: perhaps after all writing a description of a dialect without appealing to rule ordering is like riding a bicycle without handle-bars. That it *can* be done is not necessarily a reason for doing it. After all most readers of descriptive studies may be assumed to be seeking information on a particular dialect rather than theoretical insights, and it is presumably esthetically more appealing and intellectually less taxing to read that Glide Formation converts prevocalic /i/ to [y] than that either [i]:[y] alternations result from otherwise inexplicable contrasts in

underlying forms, or that there is a rule which operates under a series of complex morphological conditions. What is necessary, and what *Cypriot Greek* failed to do adequately, is to make at least crude distinctions between rule types, beginning with those which do little more than summarize perfectly transparent surface alternations, moving through those which generalize observations available to native speakers regarding inter-dialectal correspondences, and finishing with those which, while perhaps meeting all the requirements for plausibility in historical reconstruction, raise serious questions of synchronic reality.

Br. Newton
Simon Fraser University
Canada

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