Overview of Dialectology as Dialectic

*Dialectology as Dialectic* (D as D henceforth) by Jamin Pelkey (JP henceforth) is a revision of JP’s 2008 Ph.D. dissertation entitled *The Phula languages in synchronic and diachronic perspective*. *D as D* is published within the prolific *Trends in Linguistics* series by De Gruyter Mouton as the 229th of 280 volumes to date. The editors of the series regard “linguistic variation in its synchronic and diachronic dimensions as well as in its social contexts as important sources of insight for a better understanding of the design of linguistic systems and the ecology and evolution of language,” as is stated on the back cover of this book. *D as D* lives up to this viewpoint—that research in linguistic variation enlightens linguistic science—and thus is well suited for this series. An underlying theme of *D as D* is an insistence that dialectology is best carried out in the context of both synchronic and diachronic perspectives. As JP writes, “[s]ynchronic language definitions are shown to provide the categories necessary for diachronic subgrouping, and diachronic subgroupings are shown to provide validation for synchronic language definition. The two sets of knowledge are interdependent; neither can be adequately defined in a vacuum” (ix).

Since the research of *D as D* involves the Phula languages (Tibeto-Burman > Burmic > Ngwi or Yi or Loloish) of Yunnan Province, China and Northern Vietnam, *D as D* is an especially important read for Ngwi specialists. However, the content of *D as D* is also consequential for Sino-Tibetanists, historical linguists, dialectologists, and more broadly, philosophers of science and language and Peircean semioticians.

*D as D* involves the testing, disproving, and refining of the “Phula hypothesis” stated in the introductory chapter: “All synchronic languages traditionally affiliated with the Phula ethnonym also belong to a single exclusive diachronic clade linguistically” (2). The conclusion of JP’s research results in a major revision of the “Phula hypothesis” as is stated in the “Phula theorem” at the end of the book: “24 synchronic languages are affiliated with the traditional Phula ethnonym, and 22 of these languages belong to two exclusive diachronic clades linguistically” (398). It should be noted that 18 of these languages were previously unclassified. JP subgroups 22
of these languages within two clades of Southeastern Ngwi, which he dubs “Riverine Phula” and “Highland Phula,” within which he also identifies “four-meso clades and 13 micro-clades…” (272). Of the other two languages, Azha is also grouped within Southeastern Ngwi (under Sani-Axi-Azhe-Azha, or ‘SA’) and the genetic position of Pholo remains undetermined. Two other practical outcomes of JP’s research presented in this volume are representative phonologies for five of the languages (Chapter 5) and vitality evaluations for each of the 24 languages (Chapter 4).

D as D consists of eight chapters that are organized into a chiastic structure, which coincides with his philosophical framework called “chiastic dialectic” (discussed at later places in this review) as shown below (adapted from p. 396). Note that these are not the full names of the chapters:

A (§1) Synchronic Phula in diachronic perspective: Preview
B (§2) Synchronic research context: Theory
C (§3) Synchronic language definitions: Variety
D (§4) Synchronic application to future: Vitality
D’ (§5) Diachronic application to present: Phonology
C’ (§6) Diachronic language definitions: Heredity
B’ (§7) Diachronic research context: Consanguinity
A’ (§8) Diachronic Phula in synchronic perspective: Review

The first chapter is an introduction and overview to the book. Chapter 2 discusses JP’s field methods and approach to dialectology. The third chapter of D as D presents evidence from ethnolinguistic identity, core lexical comparisons, perceptual dialectology, contact, and intelligibility. As mentioned above, Chapters 4 and 5 look at Phula phonologies and language vitality, respectively. Chapter 6 discusses JP’s subgrouping of Phula, while the seventh chapter reworks Southeastern Ngwi. The final chapter of the book is an excellent summary of the entire book and would be the first chapter to go to for those pressed for time. The following sections will discuss each individual chapter including a final section that will provide an overall evaluation of the book. For each section I will use the names of the chapters as found in D as D, except for the words “Introduction” and “Conclusion” for the first and final chapters, respectively.

**Synchronic Phula in diachronic perspective**

As JP explains, in order to test the Phula hypothesis, the Phula hypothesis must first be falsifiable, that is the Phula synchronic languages and diachronic clades must be defined (3). In other words, in order to test the Phula hypothesis one needs to know Phula language and dialect boundaries (synchronic classification) and how these Phula languages have descended, i.e., subgrouping (diachronic classification). Chapter 1 sets the stage for the falsification process by discussing the historical background, field data, philosophy of research, scope and limitations, and argument structure/organization. JP’s field data includes his own fieldwork—an impressive 41 village-level fieldwork datapoints—as well as external source data for an additional 30 or so
language varieties (26-30). From those 41 datapoints, JP gathered 32,000 lexemes, 114 texts, and elicited 79 questionnaires all within a 13-month time frame (28). Altogether, *D as D* incorporates an enormous amount of data from 70 or more language varieties (30).

In discussing China’s ethnic groups, the issues of ethnic embedding cannot be avoided, a phenomena that has been going on for centuries (6–7). Ethnic embedding is like Russian matryoshka dolls, each shell fitting into a larger shell, each shell represented by its own onomastic identity. The largest shell that incorporates the most groups is usually the political *minzu* (nationality), which in the case of the Phula, and most Ngwi languages, is the Yi nationality. It is not uncommon for Ngwi language groups to have five or six layers, and for these groups ethnic embedding is just a fact of life. For example, the members of Phole-CKB have six layers of embedding: Chekabai < Phole < Hlepho < Phowa < Phula < Yi (7). The Phula languages don’t object, but in fact embrace, the relatively recent inclusion into the Yi *minzu* (7). An analogous example in another part of China not mentioned in *D as D* are the Rgyalrong in Sichuan who feel very strongly about their embedding in the Tibetan nationality and find it objectionable to be separated from this embedding (Gates 2012). Yet the Rgyalrong are also distinct from other Tibetans, and furthermore, embedded under the Rgyalrong ethnonym are at least five distinct language groups.

After this discussion on Phula ethnic embedding, JP reviews Phula previous classification (7–11), macro and micro migration patterns (11–18), and prior research (19–21). In early and more recent records there has been a clear Phula-Lolo distinction (9–10). From research into migration patterns JP suggests Dali, Yunnan Province, China as the proto-homeland of the Phula, perhaps pushed out by the Nanzhao kingdom in the 8th century (11–12). From Dali the Phula have migrated to a distribution area of about 100,000 square kilometers spreading over much of south-eastern Yunnan and spilling over the border into northern Vietnam (1, 16–17).

JP’s theoretical assumptions and approach to dialectology are summed up on pp. 31–36. JP integrates insights from traditional dialectology, Preston’s (1989, 1999) perceptual dialectology, Bailey’s (1973, 1982, 1996) implicational hierarchies for isogloss interpretation, historical-comparative sub-grouping, intelligibility testing, and extra-linguistic criteria (32–33). JP sums up his theoretical assumptions in stating “that dialectology should be useful for defining actual languages and dialects and that, in the pursuit of such definitions, dialectology should be approached dialectically” (32).

*D as D* is based on an integrative approach that is visualized in Figure 1.3 (34), which incorporates research of synchronic and diachronic, qualitative and quantitative. I am convinced however (and probably JP would agree), that this integrationalist framework would be the best approach to any linguistic phenomena, not just dialectology. In a sense, this approach provides a kind of checks and balances, as JP goes on to explain, “different insights from different approaches are called on to inform and/or correct each other” (34). *D as D* is one of the first rigorous attempts to integrate ethnohistory, culture, and cognition into dialectology informed by typology and historical linguistics (35–36). JP discusses how the discipline of dialectology does not yet have a clear and agreed upon set of criteria for defining languages, but chooses to use the criteria set out by ISO 639-3 as a general guideline (36–40). One should be aware that in order to cover the number of
dialects spread over such a vast amount of geographic space JP has not included morphosyntactic comparison, discourse analysis, and only a minor amount of acoustic phonetics (40).

This integrative and hermeneutic approach to dialectology is organically part of JP’s chiastic dialectic. Thus, JP organizes the argument structure of the book into a chiasm or in a figure-eight pattern “in which the top half complements the thematic content of the bottom half and the flow of the argument is reversed once it has run its course, allowing an inversion of antecedent and consequent…” (42). In this way, JP is able to bring those aspects of dialectology which at times seem contradictory “into complementary relationship and held in tension” (43). JP has expanded his thoughts on hermeneutic dialectology in a recent paper (2013a).

**Research background: Field methods, theory, and dialectology**

One theme in the methodology of *D as D* is *paticca-samuppāda* or ‘dependent co-arising’ (45). One way this is played out practically is in the form of working revisions of questionnaire and wordlist design. Although data elicitation tools can and should be prepared before commencing fieldwork, data elicitation tools become even more useful and helpful if they are revised in part as new insights are gained during fieldwork, especially from insights that come early in the research process.

In Chapter 2, JP goes into great detail about the logistics of his fieldwork. Sections 2.2.2–2.2.3 expounds the complex process of government, university, and institutional approval that had to be obtained to do fieldwork among the Phula (45–47). This gives an appreciation to readers who are without an awareness of doing research in China and is a helpful reference to foreigners who seek to replicate such research in other parts of China.

In §2.2.4 (47–49), JP discusses the process of his data collection. I’m impressed with the detail, and I have picked up some helpful ideas; e.g., use multiple speakers of both genders and a large age range for lexical elicitation, use data collected as a way of cognate fishing, and break data locations into primary and secondary locations. JP’s way of fulfilling the dialectologists’ responsibility to give back to the dialect community from where data was collected is enlightening and inspiring (§2.2.5). To each data location JP returned “still shots of group photos along with photos of scenery and elicitation sessions followed by edited footage of vocabulary elicitation interspersed with ethnic music footage and storytelling segments” (49).

Section 2.2.6 (50–51), goes into the details of how data was digitalized, stored and maintained, what software was used, what format files where recorded and stored in, what fonts were used, and how maps where created. In §2.3, JP reviews and evaluates his equipment, equipment usage, and methods providing his own cartoon drawing of how recording sessions where arranged (§2.3.3, 53). Again, there is much to be learned from such details including how the use of multiple microphones and recording equipment helps to capture as much context as possible (52). JP suggests using a max of three language consultants for wordlist elicitation as more than that was inefficient (54–55).

Section 2.4 discusses elicitation instruments and methodology (55–69), which includes design and administration of sociolinguistic questionnaires (55–58), wordlist design and elicitation (58-68),
and natural text elicitation (68-69). It was helpful to learn the details of JP’s wordlist creation; how he had a master list that was broken into three lists for various purposes (59). Elicitation frames are a very useful concept especially for eliciting numeral classifiers and possibly inadvertently picking up other subtle grammatical particles.

Section 2.5 discusses the methods used in doing ethnic identity research. Section 2.6 discusses intelligibility testing, primarily through using the recorded text test method (RTT). RTT testing was only a secondary research tool (80). Intelligibility testing was intentionally limited since the “incorporation of multiple perspectives, including quantitative measures and diachronic subgroupings, tends to provide satisfactory answers to questions originally intended for intelligibility testing in most cases” (40). If further testing were to be done, or if intelligibility testing were not as limited, I would suggest using Kluge’s (2007) retelling RTT method or a more recent innovation in RTT methodology—the sentence retelling RTT (Castro 2013; Gates 2013). These more recent methods offer more reliable results and the elimination of certain variables that are inherent to the traditional RTT methodology.

Reviewing the chiastic dialectic theme started in Chapter 1, JP explains his methodological approach as “[a]n experiment in triadic dialectics” (94). Instead of the choosing between one or the other in the classic dyad of synchronic and diachronic, JP’s approach reframes the approach in the biological categories of ecology, phylogeny, and ontogeny (95). These categories correspond to C. S. Peirce’s categories (tychasm, ananchasm, and agapasm) (95). The category of ontogeny/agapasm is where there is mediation and synthesis, but a type of synthesis that does not result in stasis, but rather in growth (43). JP has written more on his theory of chiastic dialectic in recent papers (2013b, c, d).

**Sychronic language definitions: Identity, intelligibility, contact**

JP begins the chapter by pointing out our responsibility as linguists to identify languages and dialects (96), then moves into a thorough discussion of onomastic identities (99–118). Next, there is a presentation of core lexical comparisons of Phula lects and an analysis of intelligibility tests (119–133). For many of the Phula lects, core lexical comparison results were low enough (> 60%) to deem intelligibility testing unnecessary. However, recorded text tests (RTTs) were used for a number of Phula lects where there were questions about intelligibility. RTTs administered in the west-regional Phula zone helped reveal levels of intelligibility that were low enough to support the separation of Pholo and Phala as distinct languages (129). JP did most of his intelligibility testing in the south-central Phula region (14 out of 24 tests). Intelligibility testing in the south-central region helped firm up the language boundaries of Northern Muji, Southern Muji, Qila Muji, Muzi, Phupa, Phuza, Phuma, Bokha, and Phupha. In the north-central region, RTTs helped with identifying the boundaries of Phole and Phowa. In the eastern region no intelligibility testing was deemed necessary.

JP summarizes his interviews and questionnaires regarding perceptions of intelligibility for each region in §§3.5.1–3.5.4 (134–153). Although this section is difficult to visualize, JP’s use of prose discussion is still the best way to relay this information, as opposed to merely quantifying it or representing the information with a few tables. However, all of the intelligibility and contact
research in the south-central region does get summarized in a helpful table (Table 3.12) found on p. 161.

Contact issues are discussed in §3.6. I found it helpful that JP divides up his discussions of external (§3.6.1) and internal contact (§3.6.2). Phula languages are in contact with Southwest Mandarin, Vietnamese (for those in Vietnam), Nisu, Nong Zhuang, Hani, Dai, Yao, and Lawu Yi among other languages. External contact has caused the creation of distinct synchronic languages visible particularly in Qila Muji, Thopho, Laghuu, Phukha, and Alo Phola (155). JP outlines nine important cases of Phula-internal contact: Phala with Phola, Southern Muji with Muzi, Muji with Bokho, Southern Muji with Phupa, Muzi and Northern Muji with Phuza, Bokho with Phuma, Khlula with Moji and Alugu, and the Phowa dialect continuum (155–159). The usual result of such contact has been the high level of learned (or contact-based intelligibility). As a result, intelligibility testing among the pairs given above has yielded high standard deviations. This has not affected learned intelligibility, and thus JP still maintains that these should be classified as separate languages, and in some cases (as established in Chapter 6) are part of separate genetic clades (e.g., Southern Muji with Phupa, Muzi and Northern Muji with Phuza, etc.). JP points out that the fact that some of these languages are part of separate genetic clades disqualify them from being the same synchronic language. Phowa is a dialect continuum, but is also three distinct languages. In §3.7 (159–163), JP integrates and summarizes all of the criteria that he uses in his division of the 24 languages that he defines in §3.8 (163–177). The names of the 24 languages are: Phala, Phola, Alo Phoa, Qila Muji, Southern Muji, Northern Muji, Muzi, Bokha, Phuma, Alugu, Phupa, Phupha, Phuza, Ani Phowa, Labo Phowa, Hlepho Phowa, Azha, Zokhuo, Khlula, Moji, Phukha, Laghuu, Pholo, and Thopho. In §3.8 each language is given a brief profile including brief information on population, location, alternative names, villages, and dialects. Since this is a helpful reference summary, it would also have been good to also include subgrouping (clade) affiliation information here.

Ethnolinguistic vitality: Contact, endangerment, and shift

For evaluating the ethnolinguistic vitality status of each of the 24 languages that are defined in Chapter 3, JP uses a six-level “graded typology of threatened status” (179), ranging from “least threatened” or “least endangered” (level 1) to “moribund” or “most endangered” (level 6) with four other levels in-between those extremes. This typology largely corresponds to the EGIDS method of evaluating language vitality (Lewis and Simons 2010). The purpose of JP’s typology is to identify general trends, as more levels could easily be added ad infinitum. JP does give an account of both the linguistic and ethnic vitality, the latter evaluated by the level of preserving material culture in each language group.

In the ensuing sections, JP gives detailed prose descriptions of ethnic and language vitality among each of the Phula languages. For Phola, although some villages are undergoing language shift (in this case to Nisu, not so much to Chinese), in the vast majority of villages Phola is alive and well (183). JP should be commended in demonstrating that using one or two villages is not enough for assessing language vitality (unless, like in the case of Alo, there is only one village that speaks the language). All too often a researcher will make conclusions about the vitality of a language based on observations from one village. In the case of Phola, if only one village was chosen to conduct research, and that village was Duolongyi, the one shifting to Nisu, then the
conclusion would be skewed. The opposite scenario could also be played out. A researcher could go to the one vital village among a language that is for the most part undergoing grand scale shift. JP made a point of collecting data (e.g., what language children communicate with their parents, what age children become functional in Chinese, etc.) from several villages in one language, and from several dialects that make up that language. For those villages that he was unable to visit, he gathered what reports he could. For example in the case of Phala, the data points he visited were “in decline ethnolinguistically” (184), but he includes the fact that reports from other villages demonstrate higher vitality for the language overall, which is why he puts the majority of the villages (76%) in the Level 2 “minimally threatened status” (221). A helpful question for researchers was JP’s inquiry into how village announcements are being made (loud speaker, shouted out, door-to-door, etc.) and in what language.

Despite the risk of oversimplifying, I will summarize the ethnolinguistic situation as follows. The Phula languages that are generally vital or stable are Phola, Southern Muji, Phuma, Alugu, Phupha, Qila Muji, Ani Phowa, Labo Phowa, Azha, Moji, and Pholo, and the Phula languages that are rapidly losing vitality are Alo, Phala, Northern Muji, Muzi, Bokha, Phupha, Phuza, Hlepho Phowa, Zokhuan, Khlula, Laghuan, Phukha, and Thopho. The vitality statistics in Table 4.1 for Moji (221) seem to be in contradiction with the prose description of Moji (216). While Table 4.1 states that 98% of Moji villages are Level 5 (“highly threatened status”), JP’s description reports high language vitality with parents still speaking to their children in Moji and “[a]ll who have married in to the village (some Han and Miao) have learned to speak Moji and also speak Moji with their children in the home” (216).

Throughout the discussion in Chapter 4, there are exceptional maps that illustrate degrees of endangeredness. As participatory methods are now becoming more in fashion, and starting to be used by researchers in Yunnan, there soon may be some fine-tuning to the ethnolinguistic vitality research that JP has conducted among the Phula (Yang, pc). This chapter should be very useful for those who want to follow up on JP’s research and do further research on one of the Phula languages. For certain research or language development projects it may save time by going to the villages where there is reported high language vitality. For language documentation projects that want to focus on quickly disappearing Phula languages and dialects reading this chapter will also clarify priorities.

**Phula phonologies: Five representative sketches**

After giving a brief overview of Ngwi branch phonology (including syllable structure, syllabic nasals, lateral fricatives, glottal initials, alveopalatal off-glides, apical vowels, compression rounding, and phonation), JP presents phonology sketches of five Phula languages, representing the five macro-clades that he discusses in Chapters 6 and 7. This again shows the interconnectedness between synchronic and diachronic, as genetic subgrouping helps facilitate a better way to prioritize which languages can be chosen to represent an entire subgroup. The five languages are Hlepho Phowa, Southern Muji, Phuza, Phola, and Azha. For each sketch there is a discussion of the syllable template, consonant initials, vowel finals, tone, and (for Hlepho and Phola) phonation. As can be expected from JP’s dialectology research philosophy, a comparison is made with other clade internal languages and dialects. Those who are interested in an in-depth
phonology of each language may be disappointed, but should be reminded that the research goals of the book only allows for a brief overview.

In terms of syllable templates and consonant initials among the five sketches, Phuza is the most rich with a syllable template of \{(C)(G)V_1(V_2)T\} and 44 consonant initials, while Azha is the most impoverished, with a syllable template of \{(C)VT\} and 33 consonant initials. However, as JP has stated, Hlepho could also be considered to have “the most complex system of consonant initials” (270). Azha’s consonant inventory is peculiar in that it does not have contrastive voicing for stop and affricate initials (264). Typo alert: JP states that there is not any voicing contrast for obstruents (264). What he probably means is that there is no voicing contrast for stops and affricates, since there is voicing contrast for fricatives (see Table 5.18 on p. 265). A further contrast erosion taking place in Azha-LJY is the merger of retroflex and alveolar affricates (267). Azha is not simple, however, when it comes to vowel finals. Thirteen phonemes are claimed for the vowel system with 6 rounding contrasts. The 13-vowel phonemes looks a bit suspicious to me, especially when the only examples for /ɛ/ and /æ/ contrast are nɛ\textsuperscript{33} and ma\textsuperscript{33}, the only contrasts given for /i/ and /u/ are ni\textsuperscript{33} and nu\textsuperscript{21} (different tonal environments), and the only contrast examples given for /a/ and /a/ are na\textsuperscript{33} nu\textsuperscript{33} and a\textsuperscript{33} nu\textsuperscript{45} (different onset and tonal environments) (268). If there are not any clear minimal pairs for these vowels, the vowel inventory may be reduced by a couple vowels. As for the other languages, Helpho and Phola have eight vowel monophthongs, Muji has nine, and Phuza has seven. A serious typo needs to be pointed out here. JP states, “A third dialect, Azha-PJZ, has been chosen as the primary representative of Azha phonology…” (264). However, there is no “Azha-PJZ,” as PJZ is a Muji lect. Instead, as JP states in the following sentences, the phonology sketch is based on Azha-LJY. This typo is repeated three other times (264, 267, 268). Thus, while reading, simply substitute LJY every time you see PJZ for the Azha phonology sketch.

Contrastive (native) phonemic diphthongs/glides can be found in all the languages, except Azha (which does have some diphthongs in Chinese loanwords). Phola has five diphthongs, and Muji has eight. Muji’s diphthongs are more robust and seem to occur more often than in the other languages. Phola’s diphthongs occur on a mere 1.46% of the syllables in JP’s database (259). While Hlepho and Phuza can be said to have diphthongs, this phenomena is marginal at best and plays only a minor role in Hlepho and Phuza phonologies, occurring in only 1% and 2% of all the syllables in JP’s database, respectively. Phuza does have, however, the glide onset /j/, occurring quite regularly (248).

Helpho and Phuza have a four-tone system, while Muji, Phola, and Azha have a five-tone system. For each of the tone systems, JP provides F0 pitch plot graphs in nasal and stop initial environments. All of the languages, except Azha, have tone sandhi rules. For all the languages contour tones are only a phonetic phenomenon. Phola is the only language with contrastive phonation, described as tense voice (263). Elsewhere, JP does mention when there is noticeable phonetic occurrence of phonation, e.g., creaky voice for Phuza’s low rising toneme, tense voice for /21/ and /13/ tonemes in Hlepho, etc.

Among Phula languages, the lateral affricate series (tl, tɬh, dɮ, etc.) is an important typological feature (242). Zokhuo is the only Phowa clade language to not have the lateral affricate series (233). Some idiolects of Muji are also losing the distinction between lateral affricates and
stops, which may mean a loss of this distinction at least for in Muji–PJZ (242). Hlepho and Phola have prenasalized stop and affricate phonemes, but in the case of Phola stops and affricates are not voiced following the nasal (257), as demonstrated in waveform diagrams (257). Muji’s nine vowels are quite gradient, sharing a lot of allophonic space so to speak (243). The phonemes /i/, /ɪ/, or /ɛ/ can all be realized as the cardinal vowel [e] phonetically and the phonemes /ɜ/, /ʊ/ or /ə/ can all be realized as the cardinal vowel [i] phonetically (243). JP’s way of representing “anticipated-but-absent” phonemes with dotted boxes in phoneme charts for Phuza, Phola, Muji, and Azha should be commended (e.g., 256, etc.). JP reveals that there are a couple possible reasons why these phonemes are not present—phoneme mergers or insufficient data—the latter reason often either not admitted or overlooked in many phonology sketches (256).

The language clades of Phula Proper: Establishing historical subgroupings

Chapter 6 is the first of the two diachronically focused chapters (6 and 7), in which the subgrouping of the now identified 24 Phula languages (and Southeastern Ngwi) is sorted. Chapter 6 focuses on 22 of the 24 languages (‘Phula Proper’), and Chapter 7 focuses on the remaining two and where they fit in with the rest of Southeastern Ngwi. JP moves from meso to macro, from the Muji and Phowa meso-clades (each with their own micro-clades, §6.3 and §6.4, respectively, pp. 285–330) to the parent of Muji and Phowa: Highland Phula (§6.5, pp. 330–335). Finally, in §6.6 the macro-clade of Riverine Phula is discussed, with the meso-clades of Upriver and Downriver along with their respective micro-clades. This is all summarized in a Stammbaum diagram on p. 351. Perhaps one should read the conclusion of Chapter 6 (§6.7, pp. 350–351) first, to help guide one’s way through the meaty details of the chapter. The same could be said of the concluding section of Chapter 7.

As a non-specialist in Ngwi, I appreciate the time that JP takes in explaining the complexities of Ngwi tone, Proto-Ngwi initials, and tonal reflexes (271–278). Section 6.2 (pages 278–284) introduces us to a methodology that JP uses for visualizing Phula internal relationships that are in the lexicon. Using the same database as discussed in Chapter 3, JP takes the inverse values of his core lexical comparisons and runs them through the SplitsTree software program, which outputs phenograms using a distance-based algorithm called Neighbor-Net. The result produces a useful visualization of Phula relationships, both synchronic and diachronic. However, as JP cautions, the output of this methodology cannot be accepted wholesale, but must be seen as a preliminary starting point for further investigation. On a whole though, the results confirmed the synchronic language and dialect divisions that JP introduces in Chapter 3. However, on the diachronic side of things, the Neighbor-Net algorithm does not detect some major subgrouping issues that can only be worked out through the comparative method (which are done in §§6.3–6.6). A couple of main relationships that SplitsTree did not catch were that Phuza and Phupa share innovations with the rest of Riverine Phula and Moji Phukha, and Thopho should be grouped with the Muji clade (284).

In §6.3.1 (pp. 285–300) JP discusses the reflexes of the Proto-Ngwi tone classes *1, *2, *3, *H, and *L, and reveals patterns, both splits and mergers, that are useful for subgrouping nine languages into the Muji clade. The most convincing and fascinating of these innovations is the
correlative redistribution of the Proto-Ngwi checked tone classes, *H and *L (§6.3.1.4, pp. 293–300). In this “mirrored merger,” *H becomes /33/ in environments following *[+continuant] consonants and /21/ in environments following *[-continuant] consonants, whereas *L becomes /33/ in environments following *[+continuant] consonants and /21/ in environments following *[-continuant] consonants. On pp. 300–307, JP uncovers a number of other shared innovations—phonological, morphological, lexical, and semantic. JP does not explain why these innovations are “more paradigm-like (and thereby more diagnostic) than others” (308). In addition, there are some innovations in this list of diagnostic innovations which are not explained and there are no examples given, e.g., “*ʔ-b > pʰ/*ɑŋ,” “*[e]arth’ lexical innovation equal to, or cognate with, mi³³kʰa⁵⁵*,” “*C-x > k ‘pick (fruit)’, e.g., Muji-PJZ kə²¹” (309). On p. 287, JP explains that in Figure 6.4 the “dominant tone patterns are represented in the darkest shade, with the secondary and tertiary splits represented in successively lighter shades.” Unfortunately, in the process of editing and typesetting this distinction is not clear as there is no shading.

The application of Charles James M. Bailey’s (1976, 1982, 1996) insights make sense of the isoglosses and innovations (311–312). The inextricable relationship between synchronic and diachronic are revealed again in Figure 6.7 (311). Time and space are a requirement for language divergence. Yet when we look at a wave model like the one JP provides for Muji clade languages in Figure 6.7, we are looking simultaneously at both already diverged languages and their continued divergence through time and space.

JP’s Phowa meso-clade (§6.4) is the first hypothesis that genetically groups Ani, Labo, Hlepho, Phukha, Khula, and Zhokuo. The languages are demonstrated to belong to 3 historical dialects Ani-Labo, Hlepho-Phukha, and Khula-Zhokuo. The Phowa clade is different from the Muji clade because not all innovations are shared across all six languages. Instead all the historical dialects share some innovations with Hlepho-Phukha, even when they don’t share them with any of the other historical dialects. Hlepho serves as a hinge in the middle between all of the languages, without which, “it is unlikely that the Khula-Zokhuo and Ani-Labo would be recognizable as present-day members of the same clade” (329). Nowhere is Hlepho-Phukha seen as a clade hinge as much as in TC-2 (317–319). For some of the reflexes of TC-2 Hlepho-Phukha groups with Ani-Labo (i.e. /*b, /*z, /*r, *Cm, *Cs, *[initial syllables]) and other reflexes Hlepho-Phukha groups with Khula-Zokhuo (/*ʔm and *s *[initial syllables]). Hlepho goes beyond Phukha in its hinge-like status sharing TC-2 reflexes with Ani-Labo (i.e. /*p). The concept of a ‘hinge dialect’ is an original contribution to dialectology from JP. My thoughts on this: hinge dialects, which are diachronic, and dialect continua (or chains), which are synchronic, seem to correlate. This connection should be researched to see if there is a general relationship between the two phenomena (dialect hinges and dialect chains) throughout the world’s languages.

Section 6.5 begins the journey of identifying shared innovations that separate out two macro-clades. The macro-clade covered in §6.5 is Highland Phula which includes 15 languages. This clade is evident from five lexico-semantic innovations, and two unusual phonological innovations. Since the main Highland Phula innovations are discussed and summarized in diagrams in previous sections, there are no summaries or diagrams at the end of §6.5.

In §6.6 the ‘Riverine Phula’ macro-clade is identified, which consists seven individual languages that belong to the insular clades ‘Upriver’ and ‘Downriver’. An excellent summary of the
historical dialectology with diagrams is given in §6.6.3 (especially Table 6.26, p. 347, and Figure 6.14, p. 348). JP arranges the innovations into ten sets, with the heaviest evidence coming from the tonal system innovations. The main evidence that supports the Riverine Phula clade is a “proto-merger of the two PNg checked-tone classes” realized now in /33/ and /21/ (or /31/) reflexes in Upriver and /55/ reflexes in Downriver (336). Another major piece of evidence comes from the merger of TC-2 and 3 in the reflex /33/ (340). Checked tones *2 and *3 generally have become the /33/ toneme. Tone class *1 supports the Downriver/Upriver split, whereas tone class *2 is primarily diagnostic for the Downriver clade. Within Downriver there are arguments for further subgrouping as TC-2 becomes /31, 33/ in Phola-Phala, /21/, /13/ in Phuza-Phupa, and /13/, /33/ in Phupha-Alugu. Phuza and Phupa, both part of Downriver, have an additional diachronic connection as in both languages TC-1 and TC-3 have merged in *ʔ-prefixeded syllables as the reflex /33/.

JP does not hide the exceptions in the data, but the overall picture seems clear through the evidence he provides. He assures us that it isn’t the *checked-tone merger on its own that is adequate evidence for subgrouping as he proposes, but rather the combination of the *checked-tone merger with the TC-2/TC-3 merger that provides convincing evidence (342). Other evidence for the Riverine clade includes the lexico-semantic merger of ‘cloud’ and ‘fog’ to a cognate of ni₅₅ xu₂¹ (342). Upriver Phula has the supporting evidence of the phonological sound change “*ak > /ɔ~o/ restricted to a few pre-voiced resonant medial environments” (343). There is also supporting evidence found in five lexico-semantic changes in the words for ‘morning’, ‘maggot’, ‘sand’, ‘head’, and ‘turban’ (343). Downriver Phula can be further subdivided in to Phupha-Alugu and Phuza-Phupa based not only on the tone system innovations discussed above, but also because of the supporting evidence from lexico-semantics and morpho-semantics. In Phupha-Alugu, these innovations can be found in the words for ‘cricket’, ‘centipede’, ‘short’, and ‘stomach’ (344–345). In Phuza-Phupa, the words for ‘morning’, ‘sheep’, and ‘sweet potato’ have unique shared innovations (345–346).

**Phula and Southeastern Ngwi: Sani, Axi, Azhe, Azha, Nisu, and Phula Proper**

The results of the discussion in Chapter 7 are summarized with a Stammbaum diagram given on p. 392. Two more sister nodes are added to the Southeastern Ngwi tree proposed by Bradley: ‘SA’ (Sani, Axi, Azhe, and Azha) and Nisu. One language that is traditionally thought of as Phula, Pholo, is excluded altogether from Southeastern Ngwi by JP’s analysis. In §7.2 (353–355) Neighbor-net algorithms are employed again to create new hypotheses, this time including traditionally non-Phula languages Sani, Axi, Azhe, and Nisu. The resulting hypothesis by JP is to include Azha with Sani, Axi, and Azhe, due to a heavily reticulated pattern that shows up in the Splits Tree analysis (Figure 7.1, p. 354). Nisu is a more distantly connected to Sani, Azha, Axi, and Azhe in the Splits Tree analysis. This hypothesis gets tested and is affirmed by using the comparative method in §§7.3–7.4. One of the outcomes of JP’s analysis is that Bradley’s “Southeastern Ngwi” and the Chinese linguists’ ‘Southeastern Yi’, while still not to be thought of as the same thing, have more overlap “than has been previously recognized” (355).

One of the most important sound changes that provides evidence of JP’s Southeastern Ngwi subgrouping hypothesis is the *bilabial stop + glide clusters to alveo-lateral affricate clusters
Nisu is considered part of Northern Ngwi by Bradley and Thurgood, but JP challenges this by demonstrating that Nisu “and other Southeastern Ngwi languages do not pattern like Northern Ngwi languages” because of key Northern Ngwi shared innovations (369). Although JP does not attempt to find Southeastern Ngwi’s place in the Ngwi branch, he does show an interesting connection that Southeastern Ngwi has with Northern Ngwi: a historical semantic shift in which the verb ‘lay (an egg)’ replaces the noun ‘egg’ or in some cases the verb and noun are flip-flopped (370). The rest of the Ngwi branches have a semantic shift that goes in the opposite direction, with the noun replacing the verb (see Table 7.6 on p. 371). In §7.4 JP demonstrates criteria for grouping Azha, Azhe, Sani, and Axi under one clade. The problem of Azha’s status is particularly important (dealt with in §7.4.1), since Azha has been associated with the ethnonym “Phula” by insiders and outsiders (376). Ten pieces of evidence are presented for JP’s SA clade (388-389), four of which are shared by all four languages. §§7.4.2.1–7.4.3.4 takes us through each of the proto-tone class innovations. TC-2 provides “evidence for grouping Sani-Axi as distinct from Azhe and Azha” (386), as does TC-L (387). Section 7.5 deals with the place of the enigmatic Pholo—the genetic position is still undetermined. Pholo does not have the lateral-cluster innovation that is a hallmark for SE Ngwi (390). There are a few tonal innovations that map onto Northern Ngwi, and some tonal innovations that are shared with SE Ngwi. However, most of the innovations that define SE Ngwi are missing in Pholo, leaving Pholo’s position for future analysis.

**Diachronic Phula in synchronic perspective**

The eighth chapter of *D as D* reviews all the arguments of the book, but as opposed to the first chapter which looked at “synchronic Phula in diachronic perspective” this final chapter looks at “diachronic Phula in synchronic perspective” (396). What this means practically is that the chapter is organized into the diachronic subgroupings that JP has worked and each subgroup or clade is discussed in terms of their synchronic languages and demographics. Underlying this organizational structure and line of reasoning is JP’s chiastic dialectic (395). JP points out that the opposite extremes of sociolinguistics (emphasized in chapters 1–4) versus historical dialectology (emphasized in chapters 5–8) could lead to differing and even opposing conclusions.
if explored exclusively. However, the middle six chapters of *D as D* provide a harmonious blend along with the first and last chapters enabling “a living argument that is structured organically, as a complex chiasm, rather than linearly, as a normative narrative or static syllogism” (395–396). JP’s blends Peircean logic with traditional chiastic structure in a unique way. All three categories of Peircean reasoning (abduction, deduction, and induction), with the balancing effect of chiastic structure, are used in tandem by a researcher to bring about an emergence of the True regarding the specimen under study (396–397).

As mentioned in the beginning of this review, JP discusses his refinement of the Phula hypothesis at this point. In §8.2 JP reviews the details of Riverine Phula, in §§8.3–8.4 JP discusses Muji and Phowa, respectively, both of which are a part of Highland Phula. In these sections we get demographics and distribution statistics along with maps and charts. These sections will be most useful for the areal specific researcher of any discipline. §8.5 is devoted to evaluating the contributions of *D as D*. From JP’s perspective, his work contributes to areal language definition, areal language endangerment studies, Ngwi linguistics and ethnohistory, language contact research, ethnic identity research, tone systems analysis, distance-based phylogenetics, intelligibility testing, regional demography, geolinguistics, field methods in linguistic survey, “hermeneutic dialectology”, and a “chiastic dialectic model of reasoning” (419–425).

**Evaluation and Conclusion**

Before giving some evaluative comments, I want to reiterate the intended audience of this book: Ngwi specialists, linguists interested in Sino-Tibetan subgrouping, dialectologists and historical linguists of any areal focus, and semioticians that are interested in the practical application of C. S. Peirce’s theories especially within the discipline of linguistics. For each of these interest groups, JP has something to offer and has accomplished his purpose in writing the book. For the Ngwi specialist and Sino-Tibetanist, JP has operationalized the Phula languages, subgrouped Southeastern Ngwi with rigorous evidence, and has given sketches of Phula phonologies and demographics. For dialectologists and historical linguists alike, JP has offered some philosophical and theoretical insights (e.g., hermeneutic and integrative historical dialectology) that should be taken into serious consideration by each respective discipline. For the Peircean semiotician JP has integrated Peircean triadic logic with the chiastic logic (or so-called rhetoric) of the ancients resulting in the chiastic dialectic model of reasoning. Additionally, it is not often that a book in linguistics has as excellent maps as can be found in *D as D*—and done by JP himself! Incidentally, C. S. Peirce was also a cartographer, producing the first quincuncial map of the world (Peirce 1879).

JP has found with the Phula languages something that should be compared with other languages to see if it is a universal tendency, namely, that clade-internal contact “tends to result in language shift,” while clade-external contact tends “to result in increased intelligibility or, in more gradient cases with temporally close genetic relationships, innovation sharing” (420). JP’s point that the first step in helping endangered languages is to first identify them is analogous to protecting biodiversity: “species conservation is dependent on species identification” (428).
JP and the editors should be commended for a nearly immaculate presentation, although some typos escaped the editing process. Examples of some of these typos are:

- p. 70, “provides some closes parallels” should read “provides some close parallels”
- p. 71, “altitude” should read “attitude”
- p. 109, “two varieties are actually belong” should read “two varieties actually belong”
- p. 209, “goes-door to- door” should read “goes door-to-door”
- p. 269, “LIY pitch plots and tonemes: Nasal initial environment” was italicized in error
- p. 308, “These 14 innovations” should read “These 16 innovations”
- p. 311, “did not reached” should read “did not reach”
- p. 357, “although analysis is Chapter 6” should read “although analysis in Chapter 6”
- p. 380, “SA Clade” should read “SA clade”
- p. 450 note 13, “sprits” should read “spirits”

These of course are only minor details that do not distract from the overall content of the book.

There are many other “Phulas” in China and beyond, many folk language categories that need careful scientific investigation and potential revision. There has been much attention given to subgrouping in Sino-Tibetan. However, at this point in time what is urgently needed is careful language data collection and analysis along with the language categorization and micro-subgrouping as done in D as D, without which it will be hard to refine the macro-subgroups. Many language documentation and language development projects would benefit from a historical dialectological program as presented in D as D. At the very least, D as D “may serve as a handbook of sorts for decision-making on documentation, maintenance and language planning projects” for the Phula languages, as JP himself suggests (431).

**References**


